

**Siemens PLM Software –
Technology Office – Technical Operations –
Product Localization**

Localization QA Guidelines

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01/07/2016	2.4	Appendix B added, Approved for release
02/05/2016	2.5	Error Categories changed; QA Assessment step-by-step description updated

NORMATIVE REFERENCES

This document incorporates provisions from other publications. These normative references are cited at the appropriate place in the text and the titles of the publications are listed below. For dated references, subsequent amendments to or revisions of any of these publications apply to this document only when incorporated in it by amendment or revision. For undated references, the latest edition of the publication referred to applies.

CAN CGSB 131.10-2008	Canadian Standard for Translation Services
DIN 2330	Concepts and terms - General principles
DIN 2345	German Standard. Translations, contracts, work procedures.
EN 15038	Translation services providers standard published by CEN, the European Committee for Standardization
ISO 1087:1990	Terminology - Vocabulary
ISO 690:1987	Documentation - Bibliographic references - Content, form and structure
ISO 690-2:1997	Information and documentation - Bibliographic references - Electronic documents or parts thereof
ISO 704:1987	Principles and methods of terminology

CONTENTS

GENERAL CONCEPTS AND DEFINITIONS	6
ABBREVIATIONS USED IN THIS DOCUMENT	7
1. BASIC REQUIREMENTS.....	8
2. PROCEDURES IN TRANSLATION SERVICES	11
3. TRANSLATION PROCESS.....	12
4. LINGUISTIC QUALITY ASSURANCE PROCESS	14
5. QUALITY ASSESSMENT OF UI AND UA LOCALIZATION PROJECTS.....	16
APPENDIX A. APPROACH AND TOOLSET FOR REDUCING THE RISK OF ERRORS	22
APPENDIX B. QA ASSESSMENT STEP-BY-STEP DESCRIPTION	25

SCOPE OF THE DOCUMENT

The purpose of this document is to establish and define the requirements for the provision of quality services provided by Siemens PLM Software language service providers with regard to human and technical resources, quality and project management, and service procedures.

It encompasses the core translation process and all other related aspects involved in providing the service, including quality assurance and traceability.

This document offers both Siemens PLM Software and language service providers a description and definition of the entire service. At the same time it is designed to provide language service providers with a set of procedures and requirements to meet Siemens PLM Software needs.

This standard specifies requirements for Siemens PLM Software translation projects, particularly regarding

- cooperation between all parties involved in the translation contract,
- selection of the translator,
- work procedures,
- the target text (translation), and
- revision of translations.

It is intended for use by all persons involved in a translation project, whether as ordering party or contracting party, although freelance translators, translation services and translation agencies are the primary addressees. The audience of this guide consists of translators, editors, proofreaders, Quality Assurance (QA) specialists, in-country reviewers (ICRs) and Project Managers (PMs).

Depending on the project to be localized, a variety of language and non-language related problems can occur. Of course not all possible problems can be addressed in this guide. This guide, however, can be considered to be the basis of the localization process QA guidelines.

GENERAL CONCEPTS AND DEFINITIONS

Competence means demonstrated ability to apply knowledge and skills.

Content means the material within a project which is to be localized.

Document means information and its supporting medium.

Edit means a process of examining a translation for its suitability for the agreed purpose, compare the source and target texts, and recommend corrective measures.

Editor means a person who performs editing.

Glossary means a list of terms with the definitions and explanations for those terms relevant to a single or group of software products.

Language Service Provider (LSP) means a person or organization supplying translation services.

Locale means linguistic, cultural, technical and geographical conventions of a target audience.

Localization means the process of adapting a product to conform to user expectations with respect to a specific language and/or country without changing that product's functionality or features unless expressly required by the applicable assignment, and the guidelines and other communications provided by Siemens PLM.

Native speaker competence means oral and written command of a language equivalent to that of a person who not only learned the language as a child and has continued to use it as his/her language of habitual use, but who also has had some language training.

Project Management means management of a Siemens PLM Software project to comply with specified project milestones and deadlines, budget, quality standards and the deliverables identified in assignments or as communicated by Siemens PLM Software project teams.

Review means a process of examine a translation for its suitability for the agreed purpose and respect for the conventions of the domain to which it belongs and recommend corrective measures.

Reviewer means a person who reviews.

Source materials mean materials in a particular language which are to be localized.

Source language means language in which the source text is written.

Source text means the text to be translated.

Target language means language that the text is to be translated into.

Target text means the result of the translation process.

Terminology means technical or special terms used in a product that relates to a specific industry or field.

Translating means the act of rendering a text from the source language into the target language in written form.

Translation competence means an ability to render the source text into the target language correctly in terms of language, subject matter and idiomatic style, having regard to the text function of both the source text and the target text.

Translation (target text) means the result of the translation process.

User Assistance (UA) means a set of online or printed reference materials that provide information to users on how to use a Product.

User Interface (UI) means the portion of a software application with which a user interacts. User Interface may include command line, menu-driven, and/or graphical User Interfaces.

ABBREVIATIONS USED IN THIS DOCUMENT

BMS	Business Management System
ID	Identifier
LSP	Language Service Provider
OS	Operation System
PBU	Product Business Unit
PM	Project Manager
QA	Quality Assurance
TM	Translation Memory
TXT	Text
UA	User Assistance
UI	User Interface
PL	Siemens PLM's Product Localization Organization

1. BASIC REQUIREMENTS

1.1 General

Where a LSP chooses to engage a third party to carry out a translation project or any part thereof, the LSP shall retain the responsibility for ensuring that the requirements of this document are met with respect to that project or any part thereof.

Siemens PLM Software is devoted to providing original text linguistically and technically correct. Siemens PLM Software is intended to inform the LSP of the purpose of the translation and if cultural differences make it necessary to alter the content of the target text as compared with the source text to enable it to serve the intended purpose in the target culture, the LSP should draw Siemens PLM Software attention to this fact.

The LSP shall endeavor to obtain supplementary information and clarification of ambiguities in the source text by contacting Siemens PLM Software.

It is the translator's and therefore the LSP's responsibility to acquire the necessary subject related knowledge.

1.2 Human resources

The LSP shall have a documented procedure in place for selecting people with the requisite skills and qualifications for translation projects. The LSP is to ensure that only suitable translators are involved in a translation project.

Translators shall have the professional competences as specified in 1.2.1.

Editors and proofreaders shall have the professional competences as specified in 1.2.2 and 1.2.3 respectively.

1.2.1 Professional competences of the translators

In his own interest, the LSP should only choose competent translators.

Translation competence: Translation competence comprises the ability to translate texts to the required level in accordance with quality requirements identified in Chapter 4 of this document. It includes the ability to assess the problems of text comprehension and text production as well as the ability to render the target text correctly in terms of language, subject matter and idiomatic style, having regard to the text function of both the source text and the target text, and to justify the results.

Linguistic and textual competence in the source language and the target language: Linguistic and textual competence includes the ability to understand the source language and mastery of the target language. Textual competence requires knowledge of text type conventions for as wide a range of standard-language and specialized texts as possible, and includes the ability to apply this knowledge when producing texts.

Research competence, information acquisition and processing: Research competence includes the ability to efficiently acquire the additional linguistic and specialized knowledge necessary to understand the source text and to produce the target text. Research competence also requires experience in the use of research tools and the ability to develop suitable strategies for the efficient use of the information sources available.

Cultural competence: Cultural competence includes the ability to make use of information on the locale, behavioral standards and value systems that characterize the source and target cultures.

Technical competence: Technical competence comprises the abilities and skills required for the professional preparation and production of translations. This includes the ability to operate technical resources and to handle translation tools required for Siemens PLM Software translation projects.

Qualification as a translator should be acquired through one or more of the following:

- formal higher education in translation (recognized degree or other qualification in translation or a comparable foreign-language or technical degree/qualification, plus demonstrable translating competence)
- professional experience, equivalent qualification in any other subject plus a minimum of two years of documented experience in translating
- at least five years of documented professional experience in translating.

The LSP shall ensure that the professional competences required above are maintained and updated.

1.2.2 Professional competences of editors/proofreaders

Editors/proofreaders shall have the competences as defined in 1.2.1, and should have translating experience in the domain under consideration.

1.3 Technical resources

LSP shall ensure the availability of the following:

- a) Requisite equipment for the proper execution of the translation projects as well as for safe and confidential handling, storage, retrieval, archiving and disposal of documents and data.
- b) Requisite communications equipment as well as hardware and software.
- c) Access to relevant information sources and media.

1.4 Quality management system

The LSP shall have a documented quality management system in place that is commensurate with the size and organizational structure of the LSP. The quality system shall include at least the following:

- a) Statement of the quality management system objectives.
- b) Process for monitoring the quality of delivered translation services and where necessary providing after delivery correction and taking corrective action.
- c) Process for handling all information and material received from Siemens PLM Software.

1.5 Project management

Each translation project shall be supervised by a project manager who shall be responsible for carrying out the project in accordance with the LSP's procedure and Siemens PLM Software-LSP agreement.

The LSP project manager shall endeavor to obtain reference information and clarification of terminology issues either with the existing UI terms or with the newly introduced, ambiguities in the source text by contacting Siemens PLM Software localization project managers or ICR directly.

2. PROCEDURES IN TRANSLATION SERVICES

2.1 General

The LSP shall ensure compliance with the Siemens PLM Software-LSP agreement and Statement of Work.

2.2 Project management

The LSP shall have documented procedures in place for handling translation projects with Siemens PLM Software during the translation process, and quality assurance to check the correctness and completeness of the service provided as well as compliance with Siemens PLM Software-LSP agreement.

Project Management applies to multiple and/or single language projects and/or functions for the Siemens PLM Software project teams.

2.3 Preliminary translation procedures

Preparation shall cover administrative, technical and linguistic aspects appropriate to the specific requirements of each translation project.

After receiving the source text for translation, the LSP shall check that it complies with Siemens PLM Software-LSP agreement. In case of non-compliance the LSP shall contact Siemens PLM Software for clarification.

2.4 Linguistic aspects

The LSP shall make sure that information concerning any specific linguistic requirements in relation to the translation project is recorded. Such information includes requirements of compliance with Siemens PLM Software style guides, adaptation of the translations to the agreed target group, purpose and/or final use, use of appropriate terminology and adapting of glossaries.

2.5 Style guides

The LSP shall ensure that the translations comply with Siemens PLM Software style guides. Style guides are provided by Siemens PLM Software.

3. TRANSLATION PROCESS

In the project translation phase the following typical steps are addressed that can be necessary for a translation project depending on its size, purpose, and intended audience, with particular emphasis on confirming compliance with project specifications.

Translation projects vary greatly in size, complexity, and the number of individuals involved in the process. A simple translation project can consist of one source text to be translated into one target language by one translator with no leveraging of previous translations. A complex project may include product training of the project participants, controlled language, document management, terminology and UI consultation with subject matter experts and LE's, several target languages, tool selection, many interrelated source documents, multiple file formats, DTP and so forth.

3.1 Specifications Agreement

At the start of the project translation phase, it is the LSP's responsibility to review the agreed-upon project specifications, so as to plan the work and assign resources to ensure that such specifications are met. The LSP shares the responsibility of making sure that all project-related materials are clear, complete and appropriate. LSP must contact Siemens PLM Software to resolve any project related questions.

In practice, UI terminology and Glossary may be agreed upon in advance, but the process is flexible. If Siemens PLM Software has a UI reference database, glossaries, or other sources of terminology referring to the translation project, they should be made available to the LSP at the outset of the project. Provided glossary, UI reference database or approved list of terms must be used as mandatory references when producing the translation. During the translation process, additional terms may be gathered and clarified within the glossary or the list of terms.

3.2 Translation

The translator shall transfer the meaning in the source language into the target language in order to produce a text that is in accordance with the rules of the linguistic system of the target language and that meets the instructions received in the project assignment.

Throughout this process the translator shall pay attention to the following:

- a) Terminology: compliance with specific domain and Siemens PLM Software products terminology, or any other terminology provided.
- b) Grammar: syntax, spelling, punctuation, orthography, diacritical marks.
- c) Lexis: lexical cohesion and phraseology.
- d) Style: compliance with Siemens PLM Software language specific style guide.
- e) Consistency: compliance with consistent translations of similar segments, as well as terminology consistency throughout the whole project.

- f) Locale: local conventions and regional standards.
- g) Target group and purpose of the translation.

3.2 Checking

On completion of the initial translation, the translator shall check his/her own work. This process shall include checking that the meaning has been conveyed, that there are no omissions or error and that the defined service specifications have been met. The translator shall make any necessary amendments.

4. LINGUISTIC QUALITY ASSURANCE PROCESS

The Linguistic Quality Assurance process is performed after translation or simultaneously depending on the translation project specifications, and embraces the following list of steps and procedures:

4.1 Edit

The LSP shall ensure that the translation is edited after the project translation.

The editing phase is an opportunity to confirm compliance with project specifications.

The editor shall be a person other than the translator and have the appropriate competence in the source and target languages. The editor shall examine the translation for the suitability of the translation for the agreed purpose and recommend corrective measures. This shall include, as required by the project, comparison of the source and target texts for terminology consistency, content accuracy, style compliance, readability and other pre-defined project checks. The editor shall compare the target text to the source text and confirm that the target text is complete, accurate, and free from misinterpretations of the source text and that the appropriate terminology has been used throughout.

Taking the editor's recommendations into account the LSP shall implement any necessary corrective measures.

Corrective measures can include retranslation.

4.2 Proofreading

As part of the standard translation task the LSP will perform translate, edit and proofread steps. The proofreader shall carry out a monolingual review to assess the suitability of the translation for the agreed purpose and recommend corrective measures.

The proofreader shall read the target text in its entirety, checking for overall coherence and readability, and referring back to the source text only when necessary. But no change in content should be made without reference to the source text.

Taking the proofreader's recommendations into account, the LSP shall implement any necessary corrective measures.

4.3 Quality Assessment

Quality Assessment is one step in the localization Quality Assurance process. Quality Assessment implies that quality awareness governs all aspects of the LSP delivered translation project from start to finish while it is being carried out. Quality Assessment is performed by Siemens PLM Software as described in chapter "5. Quality Assessment of UI and UA localization projects".

4.4 Review

Review includes a process of examine a translation for its suitability for the agreed purpose and respect for the conventions of the domain/subject to which it belongs and recommend corrective measures.

Review is performed by Siemens PLM Software and is performed against entire deliverable scope of volume as usual (might be flexible due to the initial translation project management planning).

Review is performed by domain/subject matter expert, LE and ICR and focuses on the deliverable contents.

4.5 Post-editing

Post-editing is specific for machine translated projects only. It involves the correction of machine translated project output to ensure that it complies with Siemens PLM Software quality and project expectations described in Chapters 1-3.

4.6 Linguistic Testing

Linguistic Testing is verification of the localization project translation in context of the product interface conducted by LE, ICR, target language tester or domain/subject matter expert. Linguistic Testing focuses on correct in-context linguistic usage on the actual product running, release candidate or product testing environment.

4.7 Deliverable/handoff translation verification

Deliverable/handoff translation/localization verification is performed by Siemens PLM Software localization engineers, domain/subject matter experts, in-country reviewers, project managers or QA staff.

Depending on the specifications and the complexity of the project, deliverable/handoff translation verification may be a multiphase process initiated before or after project full-scope translation and delivery. This may include the following list of checks:

- PR verification
- Deliverable install verification
- Functional collection testing

5. QUALITY ASSESSMENT OF UI AND UA LOCALIZATION PROJECTS

This section describes the method and criteria applied by Siemens PLM Software for assessing the quality of UI and UA materials projects.

The Assessment is being performed in order to provide quality evaluation in terms of acceptance criteria of the delivered translation project in a shorten period of time. The Assessment may be used to collect, track and manage information about the quality of translation projects. The major objective of the assessment is to detect whether the delivered translation project satisfies PL's quality expectations.

5.1 Quality standards

A key concept of the Assessment is the Maximum number of error points (threshold value). Reviewers (ICR) select a text sample and evaluate its quality. Reviewers categorize and assign a severity level for each error they identify during the Assessment process (Critical/Major/Minor/Suggestion). By counting the number of errors identified at each type and severity level the QA Assessment computes a quality for the translation sample reviewed. The Assessment quality of each project is computed based on the total weightings of all errors encountered in the reviewed sample and the size (total number of words) of the text sample under review. If the project's quality drops below the threshold value then further rework, proofreading, or re-translation may be required before the project is acceptable.

5.2 Classification of errors when assessing quality

To measure the quality of translation project for assessment, errors are marked for two parameters: the error type and the severity level.

The Assessment error categorization complies with the standard Product Localization QA Model error classification.

5.3 Error Types

The following error types are encountered for the QA Assessment. Listed below for ease of use as they need to be selected by their abbreviation in the tool.

Error type	Error description	Error category
Mistranslation		
TPI	Tag/Variable Position Incorrect	Mistranslation
ICT	Incorrect Command Translation	Mistranslation
MRS	Meaning Reverse	Mistranslation
TME	Translation meaning not matching English	Mistranslation
Completeness		
ENV	Missing/Broken entity or variable	Completeness
NUM	Missing/Incorrect number	Completeness
Terminology		
TMM	Term mistranslation	Terminology
PMC	Incorrect Product, Module and Component Name	Terminology

Consistency		
TMI	Term Inconsistency	Consistency
UTI	UI-Tdoc Inconsistency	Consistency
Accuracy		
IML	Improper Logic	Accuracy
OMI	Omission leading to incomplete meaning	Accuracy
TNT	Translatable string not translated	Accuracy
Style		
D3S	Different Style of Similar Sentences	Style
PUN	Punctuation (Missing/Unbalanced) (Includes special signs, newlines, ¶ section marks, tabs)	Style
SME	Space (Missing or Extra) (Includes missing space after punctuation or at beginning of entry or at end of sentence, before/after placeholder)	Style
G&M	Glossary and mnemonic	Style
Language		
SPL	Misspelling	Language
GRA	Grammar error	Language
ISE	Improper Sentence Style and Expression	Language
Suggestion		
SUG	Suggestion	Suggestion

Some error types may not apply to specific languages, and exceptions may be allowed for certain languages. These are noted in the corresponding language style guide.

Examples:

1. Case, grammar and/or misspelling may not apply in some languages.
2. For Russian and Chinese (Simplified and Traditional), entities may be replaced with the actual name of the term otherwise represented by the entity.

5.4 Severity level of errors

Severity level is a measure of how much damage an error causes. Every defect identified during a review is assigned a severity level by the reviewer.

Four levels of error severity are distinguished: suggestion, minor, major, and critical, which are assigned different weight factors.

These four levels are defined as follows:

Severity	Definition
Critical	<p>Errors that can lead to loss of data and information or cause OS failure on customer computers.</p> <p>Any error which could result in legal issues or cause embarrassment for the company, or cause GTAC calls, for instance:</p> <ul style="list-style-type: none"> • Inaccurate Product name • Violates laws related to trademarks or copyrights <p>Errors in highly visible part of UI and UA materials (main page, title page).</p>
Major	<p>Any error which impairs customer productivity, blocks the customer's ability to perform the task or comprehend the text correctly, or to locate additional information.</p> <p>Major errors include important translation mistakes in the text, for example:</p> <ul style="list-style-type: none"> • Errors that distort the meaning of the text as a whole. • Errors which appear in an important or visible location such as the menu bar, a command, header. • Results in a potentially offensive statement. • A minor error appearing repeatedly throughout the document: for example, the document contains more than thirty minor spelling mistakes. <p>Major errors can misrepresent the software, for example:</p> <ul style="list-style-type: none"> • Translation error in an instruction which causes software to crash, or which misrepresents the software's functionality. • Modifies or misrepresents the functionality of the localized software. <p>Major errors can also arise from process errors, for example:</p> <ul style="list-style-type: none"> • QA feedback has been provided, but has not been implemented, and there is no valid reason for not implementing it. • Special requests which were not implemented by LSP. • Style Guide, Project guidelines and Glossary violations causing global style/term inconsistency.
Minor	<p>Default error severity level.</p> <p>When the meaning of the text is understandable but is phrased in an awkward or ambiguous way: efforts to interpret the text correctly might slow down user productivity.</p> <p>Frequent occurrence of the same/similar error may escalate the severity to Major.</p>
Suggestion	<p>Suggestions referring to applying particular grammar, syntax or synonym constructions that will cause enhancement of the text readability and comprehension.</p>

5.5 Method for assessing UA materials project quality

Quality Assessment of UA materials projects takes place in three steps:

1. Selection of text samples for assessment.
2. Review of selected samples including errors categorization and prioritization.
3. Calculation of the total error score, comparison to standard Siemens PLM Software threshold value, assignment of quality level to the project.

5.5.1 Selection of text samples for assessment

To assess the quality of a UA materials based project, multiple fragments are sampled from different parts of the project. When sampling texts for assessment, the following guidelines are used:

- Small projects with less than 500 newly translated words are not suitable for quality assessment using the described method.
- Projects of 500 to 2,000 words are assessed in their entirety, but no QA report is required. High level feedback to be provided as necessary.
- In projects of more than 2,000 words, text samples of 1,000 to 2,000 words are selected, taking into account the specifics and content of the project.

5.5.2 Review of selected samples and error calculation

Review of selected text samples and error calculation is being performed strictly following Product Localization QA Model prescriptions (see Product Localization QA Model User Guide for reference).

Each error found during the review procedure will be included into the project corresponding SPLM QA Model Review tracker sheet. Each entity should include the following data: Source segment text, Current Translation text, Reviewer's Correction text, Error Type, and Severity level.

After the review is completed, the impact of all indicated errors is evaluated as a sum of the error type and the error severity level of each issue. This value is divided by the sample word count total.

5.6 Method for assessing UI translation project quality

The linguistic quality of localized UI strings is defined as the absence of errors, or faithfulness to the source UI strings. The impact of an error on the customer is used as major ground to measure the severity of an error (the extent of the departure from Siemens PLM Software standards is also used as well as the cost of fixing a particular error).

UI translation projects are assessed in their entirety.

Each error found during the review procedure is being included into the project corresponding SPLM QA Model Review tracker sheet. Each entity should include the following data: Source segment text, Current Translation text, Reviewer's Correction text, Error Type, Severity level.

After the review is completed, all indicated errors are classified into groups by type and severity level. The number of errors in each group is calculated.

5.7 Total error score calculation and Siemens PLM Software standard threshold values

Severity Weight (SW)	
Suggestion	0
Minor	1
Major	2
Critical	3

Quality Assessment weight	
Error Category	Error Category Weight (ECW)
Accuracy	2
Completeness	3
Consistency	2
Language	2
Mistranslation	3
Style	1
Terminology	2
Suggestion	0

Target language	MAXEP (Acceptance Criteria)
All languages	2.0

Word Count Weight (WCW)	100 divided by Text Sample Word Count
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Project Quality Weight (PQW)	
Release Quality	1

Severity Weight (SW) is a factor that reflects error impact on the project quality and is set for each of the found errors individually.

Error Category Weight (ECW) is set depending on the error category defined for each of the found errors individually.

Note:

UTI (UI-Tdoc Consistency) (Consistency category) weight is decreased to 1.

G&M (Glossary and mnemonic) (Style) weight is increased to 2.

Project Quality Weight (PQW) is introduced for the consideration of the project content difficulty and source quality. Current template value is set to 1.

Word Count Weight (WCW) is a scaling factor for evaluating text sample word count impact.

MAXEP reflects Siemens PLM Software quality expectations and acts as a threshold value for the Assessment.

NEP is a number of actual error points calculated for a certain project during the Assessment.

$$NEP = WCW \times PQW \times \text{SUM} (SW_1 \times ECW_1, SW_2 \times ECW_2, \dots, SW_n \times ECW_n)$$

Where **n** stands for the number of errors found in the text sample,
 $SW_i \times ECW_i$ stands for the multiplication of Severity Weight and Error Category Weight for each of the errors individually

The quality assessment is based on the following calculation sequence:

- Multiplication of SW and ECW per each of the errors found in the text sample.
- Sum of the multiplications: **SUM** ($SW_1 \times ECW_1, SW_2 \times ECW_2, \dots, SW_n \times ECW_n$).
- NEP is calculated as a multiplication of the Sum and WCW x PQW.

If NEP is less than MAXEP, the project achieves a category **PASS**.

If NEP is equal to or greater than MAXEP, the project achieves a category **FAIL**.

If the project achieves a category **PASS** then the project is considered to be sent to the next step and reviewed in its targeted for this step content

If the project achieves a category **FAIL** then the project is considered to be deficient and should be returned to vendor for applying additional corrections.

APPENDIX A. APPROACH AND TOOLSET FOR REDUCING THE RISK OF ERRORS

This section provides instructions and recommendations for identifying and reducing the risk of errors. Information is sorted regarding error types stated in PL's QA model.

TPI	Tag/Variable Position Incorrect	Mistranslation
SME	Space (Missing or Extra) (Includes missing space after punctuation or at beginning of entry or at end of sentence, before/after placeholder)	Style

WorldServer replaces tags and variables in source text with placeholders (ex. {101}).

Placeholder errors occur when placeholders in the source are missing from the target. If placeholders are missing in target segment, a red **X** appears in the affected segment. All placeholders should be resolved in a project before you can upload it to WorldServer or export it. On contrary if you try to do this, you'll receive a notification about Placeholder issues. To resolve placeholder errors, match the placeholders in the target segment to those in the source.

You can use **Check Placeholders Ctrl+Shift+C** option included in WorldServer Desktop Workbench in order to identify and correct issues with the placeholders.

In ApSIC Xbench 2.9.474 you can use **Tag Mismatch** check from **Content** check group.

In Verifika 2.5.1 and later versions you can use **Inconsistent tags in source and target, Space around tags, Inconsistent spaces around tags in source and target, Tag order** checks in **Tags** section on **Common** tab and **Multiple spacing, Spaces around punctuation, Start and end spaces in Punctuation and spacing** section on **Common** tab.

Passolo includes the following checking options for tag/variable consistency within source and target segments:

- Inconsistent printf formats: checks format specifiers like %s or %d that have to be preserved in the translation. Also the order of format specifiers should not be changed.
- Inconsistent FormatMessage() formats: *checks* special format specifiers that are used in conjunction with FormatMessage(). Normally they look like %1, %2... but they can also include additional formatting information such as %1!s!. The order of these format specifiers might change in source and target text, but the format specifiers itself must be the same.
- Inline patterns: user defined regular expressions that provide rather broad opportunities for setting customized rules.

TCL Util could be recommended as a tool that includes options for checking enterprise variables, engineering variables, percent variables.

UI Review Tool includes an option for searching Invalid Teamcenter variables (#string#format)

ENV	Missing/Broken entity or variable	Completeness
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Missing/broken entities refer to the spelling, punctuation errors with Tdoc variables (ex. source segment contains &prod-nx; when the target 1) contains &prodnx; or prod-nx;; 2) doesn't include this variable it at all).

For some languages, entities may be replaced with the actual name of the term otherwise represented by the entity.

TCL Util could be recommended as a tool with functionality for checking missing or broken entities.

NUM	Missing/Incorrect number	Completeness
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Segments with number mismatches between source and target segments.

WorldServer Desktop Workbench includes an option for checking number inconsistency between source and target segments: **Check Consistency → Check Numbers in the Current Segment Ctrl+Shift+N.**

ApSIC Xbench: You can use **Numeric Mismatch** check from **Content** check group.

Verifika: You can use **Inconsistent numbers, Number formatting, Space between text and numbers, Number sign, Ranges** checks from **Numbers and ranges** section on **Common** tab.

UI Review Tool includes an option for filtering strings that have source and target identical.

ICT	Incorrect Command Translation	Mistranslation
MRS	Meaning Reverse	Mistranslation
TME	Translation meaning not matching English	Mistranslation
D3S	Different Style of Similar Sentences	Consistency
IML	Improper Logic	Accuracy
OMI	Omission leading to incomplete meaning	Accuracy
G&M	Glossary and mnemonic	Style

This group of checks could hardly be automated.

Verifika: In case if project glossary is provided then you can **Import** it as a list of terms for **Terminology** check on **Terminology** tab.

TMM	Term mistranslation	Terminology
PMC	Incorrect Product, Module and Component Name	Terminology
TMI	Term Inconsistency	Consistency
UTI	UI-Tdoc Inconsistency	Consistency

Segments that contain inconsistent translations of terms, product, module, component names within a project or within UI-Tdoc.

WorldServer Desktop Workbench includes an option for filtering all segments at once that have inconsistency issues.

ApSIC Xbench includes functionality for performing **Inconsistency in Source**, **Inconsistency in Target** (sometimes also occur due to the issues in target), **Key Term Mismatch** checks.

Verifika: In case if UI reference is provided then you can **Import** it as a list of terms for **Terminology** check on **Terminology** tab. You can use **Check target inconsistency** option on **Consistency** tab.

TCL Util could be recommended as a tool for checking UI-Tdoc consistency.

SPL	Misspelling	Language
GRA	Grammar error	Language
ISE	Improper Sentence Style and Expression	Language
SME	Space (Missing or Extra) (Includes missing space after punctuation or at beginning of entry or at end of sentence, before/after placeholder)	Style
TNT	Translatable string not translated	Style
PUN	Punctuation (Missing/Unbalanced) (Includes special signs, newlines, ¶ section marks, tabs)	Style

WorldServer Desktop Workbench includes spellchecking option that helps to find out issues mentioned above.

In certain cases use of the built-in spellchecker may not be productive, so you may need to export all strings as tab delimited txt, open with Excel, select target column and copy it to MSWord. After this you may perform spell check in MSWord.

Verifika: You can use **Check spelling** option for performing spelling check on **Spelling** tab; **Punctuation and spacing** section on **Common** tab; **Apostrophes, Quotation marks** checks in **Quotes and apostrophes** section on **Common** tab.

TCL Util could be recommended as a tool with very broad amount of customizable punctuation checks.

APPENDIX B. QA ASSESSMENT STEP-BY-STEP DESCRIPTION

This description is one of many steps to formalize the assessment procedure with the goal to reduce the overall time that is needed reviewing and verifying manual translations while increasing the initial translation quality.

The following is the entire procedure we are expecting for an assessment (this includes steps inside and outside of WorldServer).

An assessment assignment in WorldServer should take between 2 and 4 hours, and will require the following steps to be performed:

1. Export project from WorldServer to Desktop Workbench (or Trados Studio) and create your Desktop Workbench (or Trados Studio) project
2. Perform the relevant checks in Verifika Version 2.5.1 against manual translations
 - a. For Desktop Workbench project:
 - Select “Protection” tab → Idiom XLIFF and check “Locked” and “ICE” options in “Select segments to protect” section;
 - Check “Do not report error from these segments “ in “Select how segments should be protected (for all file types)” section
 - b. For Trados Studio project:
 - Select “Protection” tab → SDL XLIFF and check “100% matches”, “Locked”, “Approved Translation”, “Signed off”, “Context Match” options.
 - Check “Do not report error from these segments “ in “Select how segments should be protected (for all file types)” section
 - c. Load Verifika QA profile (specific for your language or the uniformed).
 - d. Run checks and generate QA report in Verifika.
 - e. Add segments with issues into the Quality Assessment spreadsheet
3. Perform the placeholders check against manual translations
 - a. Add segments with issues into the Quality Assessment spreadsheet
4. Select a random sample of approx. 1,000 to 2,000 manual translations words.

Note:

- *Projects with less than 500 words of manual translations are not suitable for assessment and from 500 to 2,000 words should get assessed entirely, but no QA report will be required (high level feedback to be provided as necessary).*
- *Fuzzy matched, machine translated and manually translated segments can be selected if project was translated with the use of MT.*

For Desktop Workbench project:

- a. Open Desktop Workbench project and select ‘All except ICE and 100% Matches’ filter in the project.
- b. Export filtered segments to a text file (File > Export > Segments ...)
- c. Open the text export with Excel.
- d. Select a random text sample (approx. 1,000 to 2,000 source words) from the export and add it to the Quality Assessment spreadsheet (columns Source and Current Translation).

For Trados Studio project:

- a. Open Trados Studio project and Export it for external review to file (Review tab > Export for External Review)

- b. Open exported files with MS Word and copy all the contents to MS Excel.
 - c. Exclude segments with 'Context Match' and 'Perfect Match' status.
 - d. Select a random text sample (approx. 1,000 to 2,000 source words) from the export and add it to the Quality Assessment spreadsheet (columns Source and Current Translation).
5. Review the selected text sample in the Excel file and outline the issues in the QA Assessment spreadsheet.
 6. Set Error Type and change Error Severity for each of the found issues.
Note: if segment includes several issues then each of the issues should be considered separately. Reference for Error Severity: Localization QA Guidelines.
 7. Open QA Results tab in the spreadsheet, select Language and input Text Sample Word Count value equal to the word count of source text in column Source on Reviewer Tracker tab.
 8. Compare NEP (Error Rate) with the MAXEP (Threshold value) = 2,0 %, and decide if the assessment passed or failed
 - a. If NEP is less than MAXEP, the project achieves a category PASS.
 - b. If NEP is equal to or greater than MAXEP, the project achieves a category FAIL.
 9. Perform the final completion steps based on the PASS/FAIL decision:
 - a. If the assessment was PASS:
 - i. Implement your changes into Desktop Workbench or Trados Studio project
 - ii. Check similar issues in the remaining manual translations
Note: Depending on language, make sure to set the review flag for the correct segments.
 - iii. Perform your usual language depending checks
 - iv. Import the changes into WorldServer
Note: Make sure to re-validate the placeholders, this should be quick, and it is part of our process before importing files to WorldServer.
 - v. Upload the QA Assessment spreadsheet to the MyCommunity corresponding to your language storage
 - vi. Complete the files and select "Pass"
Note: This completes the assessment, and sends the files back to the Project Manager to continue the project.
 - b. If the assessment was FAIL:
 - i. Upload the QA Assessment spreadsheet to the MyCommunity corresponding to your language storage
 - ii. Complete the files in WorldServer and select "Fail"
Note: This completes the assessment, and sends the files back to the vendor to rework incorrect translations.

For cases where it is not possible to perform an assessment, the completion option "Skip Assessment (Note: Files will be completed from WorldServer)" was added to the workflow. This should only be used after discussing with the Project Manager. This option will close the project in WorldServer and complete all files.

To help counter some special situations in the translation workflow the following special cases were added to the current assessment procedure:

- The translation vendor needs to deliver any outstanding questions with the delivery of the translation project
- The assessor receives these vendor questions with the assessment project, and answers them as much as possible

Note: If there are no questions delivered, then the vendor didn't have any questions.

- Any issues found due to unanswered questions should be reported as SUG (suggestion)
- Any issues with inconsistent UI translations (UTI) should be recorded as SUG, if the UI wasn't supplied to the vendor or the particular UI string has changed since the translation started.

Note: This needs be verified by the Project Manager before sending the project back.