ISO standards and working processes at the United Nations language services: a comparison

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Abstract

International standards, in particular those developed by the International Organization for Standardization (ISO), are a universally recognized means of guaranteeing service quality. In the translation and language industries, the demand for ISO-certified services has been growing steadily since the publication of ISO 17100, on requirements for translation service providers, which addresses translation-specific processes that are essential for ensuring quality. ISO 17100 covers a wide range of aspects, from the competences of translators, revisers and project managers, to technology and quality management requirements, or the need to assess client satisfaction and take corrective action if necessary. All these tasks are performed by the language services of the

United Nations, which therefore can benefit from an in-depth analysis of both the standard requirements and the changes implemented by private sector providers that have obtained certification. The present study covers all the tasks included in ISO 17100, with a focus on improving and harmonizing existing working processes and suggesting their establishment where they are lacking.

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Introduction

International standards are a universally recognized means of ensuring the consistent quality of the services which an entity provides to its clients. The largest developer of standards worldwide is the International Organization for Standardization (ISO), which so far has published 21.840 International Standards and related documents, covering almost every industry, from technology, to food safety, to agriculture and

healthcare.¹ In recent years, both private sector companies and public institutions have increasingly sought ISO-certification. Within the United Nations system, certification has been achieved by several entities, ranging from whole agencies to individual sections and units.²

The publication in 2015 of ISO 17100, on requirements for translation services, was a highly anticipated event in the language industry, because the standard addresses translation-specific processes which are important for ensuring quality. According to the ISO description of the standard, it "provides requirements for the core processes, resources, and other aspects necessary for the delivery of quality translation services that meet applicable specifications". ³ ISO 17100 covers a wide range of aspects, from competence requirements for translators, revisers, reviewers, proofreaders and project managers, to technology and quality management requirements, or the need to assess client satisfaction and take corrective action if necessary. There are also other standards that deal specifically with certain aspects of the work of language service providers, including ISO 18587, on machine translation, currently in development, or the various standards on terminology work, like ISO 860.

At the United Nations, the tasks covered by ISO 17100 are performed by the Documentation Division of the Department for General Assembly and Conference Management (DGACM). As the General Assembly recalled in its resolution 70/9, the major goals of the Department are to provide high-quality documents and high-quality conference services to Member States, and to achieve those aims as efficiently and cost-

¹ See <u>https://www.iso.org/about-us.html</u>.

² For example, the United Nations Office for Project Services (UNOPS) received ISO-9001 certification in 2011 for its global quality management system (see <u>https://www.unops.org/english/News/Pages/UNOPS-is-ISO-9001-</u> <u>certified.aspx</u>), whereas the Production and Support Service of the Division of Conference Management in Geneva obtained ISO 14001:2004 certification in 2010 for its printing and distribution operations (see <u>https://www.unog.ch/80256EE60057CB67/(httpPages)/365670CED88B8FEAC1257ED90043D1F1?OpenDocument</u>).

³ <u>https://www.iso.org/standard/59149.html</u>.

effectively as possible.⁴ In line with the increasing prominence that the issue of standardization has been gaining within the United Nations system, DGACM has begun to reengineer and harmonize its working methods, given the fact that it has to balance inhouse and contractual translators, machine and human translation, and do more with less, all of which can impact quality. In this respect, the General Assembly has noted the initiatives undertaken in the context of integrated global management aimed at streamlining procedures, ⁵ and welcomed the efforts made by DGACM to seek the evaluation by Member States of the quality of the conference services provided to them.⁶

The purpose of the present study is to compare the working processes in the language services of the Documentation Division with the requirements of ISO 17100 and with the processes used by ISO-certified private companies. The ultimate goal is to determine which ISO requirements can inform the reengineering and standardization of the Division's working processes to align them with the international standards for excellence in the industry, as well as to recommend changes in order to promote the implementation of DGACM mandates and the relevant General Assembly resolutions.

Methodology

The comparative study was carried out in four stages. The first stage involved an in-depth analysis of the existing standards applicable to the working methods and processes of language service providers (LSPs). The study was based on ISO 17500, which

⁴ A/RES/70/9, para. 40.

⁵ Ibid., para. 38.

⁶ Ibid., para. 49. More specifically, the General Assembly requested common standards for the quality control of documents processed by external translators and globally standardized performance indicators aimed at a more cost-effective strategy for the in-house processing of documents (ibid., para. 106 and 108).

is the specific standard for translation service providers (TSPs). For additional insights I referred to ASTM F2575, "Standard Guide for Quality Assurance in Translation".⁷ Finally, and given the fact that, before ISO 17500 was issued, many LSPs had become certified in the ISO 9000 series,⁸ I also analysed its main requirements, as described in the abundant literature on the subject.⁹

The second stage consisted of studying the working methods and processes of the language services at the United Nations Headquarters in New York. The research approach was to consider the language services as a case-study.¹⁰ The informants were selected by sending an e-mail to unit chiefs, who either agreed to be interviewed themselves or recommended interviewing staff involved in project management, mostly programming officers.¹¹ Out of the eight language services of the Documentation Division (seven translation services plus the editorial service), seven agreed to participate in the study.¹² I conducted in-depth structured interviews¹³ with one informant from each service using a questionnaire which consisted of 18 questions in the case of translation services (see annex, table 1) and 20 questions in the case of editors (see annex, table 2). The interviews

⁷ See <u>https://www.astm.org/Standards/F2575.htm</u>.

⁸ "The ISO 9000 family addresses various aspects of quality management and contains some of ISO's best known standards. The standards provide guidance and tools for companies and organizations who want to ensure that their products and services consistently meet customer's requirements, and that quality is consistently improved." (https://www.iso.org/iso-9001-quality-management.html).

⁹ In particular, Hill, Self and Roche, 2011; Kanter, 2000; Newslow, 2001; Paradise and Small, 1996; Sanders and Scott, 1997; and Stimson, 1998.

¹⁰ Case studies are "intensive descriptions and analyses of a single unit or bounded system, such as an individual, program, event, group, intervention or community" (Merriam, 1998, p. 19).

¹¹ Programming officers are the project managers of the United Nations language services. There is one in each service, and the function is usually performed by senior staff with a thorough knowledge of the service and United Nations documentation.

¹² The Chinese Translation Service, the Editing Section, the English Translation Service, the French Translation Service, the German Translation Section, the Russian Translation Service, and the Spanish Translation Service participated in the study.

¹³ "In-depth interviews tend to be of relatively long duration. They commonly involve one-on-one, face-to-face interaction between an interviewer and an informant" (Johnson, 2002, p. 2). "In highly structured interviews, sometimes called standardized interviews, questions and the order in which they are asked are determined ahead of time" (Merriam, 1998, p. 74).

lasted between 70 and 120 minutes; four were conducted in English and two in Spanish. I subsequently summarized in English the answers from all six interviews and sent the summaries back to the informants for accuracy purposes. The final answers were then collated to produce an overview of the working methods and processes used by the language services. The information gathered through the interviews was complemented with my own knowledge and observations¹⁴ of the working processes and the official instructions and current standing operating procedures (SOPs). ¹⁵ Processes covered included translation, revision, domain review, proofreading, ¹⁶ terminology, project management, quality control and client feedback.

The third stage was a study of certified LSPs from the private sector and the changes implemented in their business processes in order to achieve certification. The LSPs to be surveyed were selected through Internet searches for ISO-17100 certified translation agencies. I contacted them by e-mail requesting their participation in the study and attaching a questionnaire of five questions (see annex, table 3), to be answered by e-mail, though the option of replying by phone was also offered. Since all these LSPs had already obtained several ISO certifications, including ISO 17100, there was no need for them to describe their working processes. Instead, my questions focused on the changes

¹⁴ This is the methodology recommended by Williams and Chesterman for research at the institutional level: "a combination of observation, interviews and questionnaires" (2002, p. 24).

¹⁵ At the United Nations, this term, originally used in peacekeeping contexts, refers to a "Set of instructions on standardized procedures to be followed for operational routines. The procedure is applicable unless otherwise ordered." (*Introduction to UN Peacekeeping Pre-deployment Specialized Training Materials for Staff Officers*, 2011, available at http://repository.un.org/bitstream/handle/11176/89583/STM% 20Military% 20Staff% 20Officers.pdf?sequence=1&isAll owed=y). A SOP is a standing instruction, often based on best practice, that provides staff with guidance on how to implement a specific task, process or activity, or to achieve a desired result.

¹⁶ Revision, also called bilingual editing, is an in-depth review of a translation performed by a second linguist to assess its suitability for the agreed purpose, and involves comparing the source and target texts, and recommending or implementing corrections. Domain review is a monolingual editing of the translation by domain specialists, without comparing it to the source text, while proofreading involves revision and correction of the target language content before printing.

they had implemented in those processes in order to achieve certification. Out of nine LSPs contacted, three answered the questionnaire,¹⁷ two in English and one in Spanish.

In the fourth and final stage, the information gathered from the United Nations language services was compared with the requirements of ISO 17500 in order to ascertain to what extent the working processes and methods described in the interviews would comply with the standard, and to identify areas of non-compliance which could be candidates for reengineering and alignment with the requirements of ISO 17500.

The design of the interviews and questionnaires, as well as the subsequent analysis, was based on the abundant literature on social studies research techniques, particularly qualitative research and grounded theory.¹⁸ This approach was chosen because it allows the researcher to combine different sources of data collection in order to study the same phenomenon, which in this particular case offered a distinct advantage over other simpler, purely descriptive research methods.¹⁹

Results

1. Study of United Nations language services in New York

¹⁷ EVS Translations GmbH (www.evs-translations.com); Montero Traducciones (http://www.monterotraducciones.com); and STAR Servicios Lingüísticos (www.star-spain.com).

¹⁸ In particular: Charmaz, 2005; Corbin and Strauss, 2008; Johnson, 2002; Laban, 1980; Merriam, 1998; Stake, 2005; and Yin, 2014. Grounded theory methods consist of simultaneous data collection and analysis, and are especially appropriate for studying processes (Charmaz, 2005, p. 508).

¹⁹ An important consideration in this study was "the desire to triangulate or obtain various types of data on the same problem, such as combining interview with observation, then perhaps adding documents for the purpose of verifying or adding another source of data" (Corbin and Strauss, 2008, p. 27).

The United Nations language services are part of the DGACM, the largest department in the Secretariat, in particular its Documentation Division. The documentation management chain ranges from the receipt of manuscripts, through editing, referencing, translation, text-processing, copy preparation and proofreading, to printing and distribution of reports and publications. DGACM produces documentation in the six official languages (Arabic, Chinese, English, French, Russian and Spanish) as well as in German on occasion.²⁰ As most institutional LSPs, the Division's approach to quality is top-down,²¹ with quality control being exercised by senior staff (revisers) over junior staff (translators), and by in-house staff over external contractors.

International Standard ISO 17100, on requirements for translation services, issued in 2015, specifies requirements for all aspects of the translation process directly affecting the quality and delivery of translation services. It includes provisions for TSPs concerning the management of core processes, minimum qualification requirements, the availability and management of resources, and other actions necessary for the delivery of a quality translation service. The standard is intended for implementation by TSPs of any size. Conformity requires all the provisions to be met, but the methods of implementation may differ depending on the size and complexity of the organization and, in some cases, on the volume and complexity of the translation service being requested of the TSP.²²

The degree of compliance of United Nations language services with the individual requirements of ISO 17100 is explained in table 1 below. Requirements are paraphrased

²⁰ <u>http://www.un.org/depts/DGACM/functions.shtml</u>. The organizational chart of the Department is available at http://www.un.org/depts/DGACM/chart.pdf.

²¹ "Industry approaches to translation quality can be grouped in two broad camps: top-down and bottom-up. [...] Topdown approaches are hierarchical, driven from the top. They harness translation expertise and aim to manage or control quality levels. [...] Bottom-up approaches, in contrast, are led by users or suppliers themselves. They draw on targetlanguage ability and/or product expertise, combined with end user feedback loops, rather than translation competence." (Drugan, 2014). For a more detailed analysis of these models, see Drugan, 2013, chap. 4.

²² ISO (2015). ISO 17100 Translation Services – Requirements for translation Services (First edition).

from the standard, but the numbered headings are literal quotations. For ease of reference, the degree of compliance is colour-coded, full compliance being indicated by green, partial compliance by yellow and non-compliance by red. The figure following table 1 shows the degree of compliance as a percentage of the total number of requirements included in the standard.

Table 1. Compliance of United Nations language services with the requirements of ISO)
17100.	

<u>3. Resources</u>	
<u>3.1 Human resources</u>	
REQUIREMENT	COMPLIANCE
3.1.1 General TSPs must have a documented process to ensure that translation staff ²³ has the necessary competences and qualifications, and keep a record of those competences and qualifications.	 In-house: translators are hired through a language competitive examination process, which is fully documented. Contractors: translators submit resumes, which are archived in each translation service. New candidates also have to pass a test which mirrors the language competitive examination.
3.1.2 Responsibility for sub-contracted tasks TSPs must ensure that sub-contracted translation tasks comply with the standard.	• Sub-contracted tasks are managed by translation services, and are subject to the same controls and evaluations than in-house jobs.
3.1.3 Professional competences of	

²³ The term "translation staff" is used in this report to refer to all staff involved in the translation process, including translators, revisers, domain reviewers and proofreaders.

translators

a) **Translation competence**: ability to translate content from the source language into the target language, according to project specifications.

b) **Linguistic and textual competence**: ability to understand the source language; target language fluency; general or specialized knowledge of the text-type conventions of the source and target languages.

c) **Competence in research, information acquisition and processing**: ability to acquire additional knowledge to understand source language content and produce target language content, including experience in the use of research tools and strategies.

d) **Cultural competence**: ability to use information on terminology, values and conventions of the cultures of the source and target languages.

e) **Technical competence**: ability to perform technical tasks involved in the translation process, including information technology systems and tools.

f) **Domain competence**: ability to understand source language content and reproduce it in the target language with the appropriate style and terminology.

3.1.4 Translator qualifications

TSPs must obtain proof that translators meet at least one of the following criteria:

a) first-level degree in translation or linguistic studies that include translation;

- **In-house**: the language competitive examination evaluates candidates based on their translation, linguistic, textual, and domain competences. Technical competence and competence in research, information acquisition and processing are evaluated during a two-year training period.
- **Contractors**: competences are evaluated through initial testing and ongoing quality control.

• **In-house**: candidates must meet academic requirements that vary depending on the service, but professional experience is not considered sufficient without a degree.

b) any other first-level degree plus two years of full-time professional experience in translation;c) five years of full-time professional experience in translation.	• Contractors : the situation varies from service to service, but professional experience is generally considered more important than in the case of in-house translators.
3.1.5 Professional competences of revisers TSPs must ensure that revisers have all the above competences and qualifications, as well as experience in translation and/or revision for the relevant domain.	• In-house translators and contractors can only become revisers after demonstrating the relevant competences and domain experience.
3.1.6 Professional competences of reviewers TSPs must ensure that reviewers are domain specialists and have qualifications from a higher- education institution and/or experience in that domain.	• Domain review is rare but, when provided, is always performed by senior revisers with both academic qualifications and experience in that domain.
3.1.7 Competence of translation project managers TSPs must ensure that project managers have documented competence, which can be acquired through formal or informal training (i.e. higher- education or on-the-job experience) and includes a basic understanding of the translation industry, a thorough knowledge of the translation process, and project management skills.	• Project managers are trained mostly on the job, and therefore acquire a thorough knowledge of the translation process, but not necessarily have a basic understanding of the translation industry or project management skills. Their competence is usually not documented.
 3.1.8 Recording regular maintenance and updating of required competences TSPs must have a process for recording the regular maintenance and updating of competences through training or other means. 3.2 Technical and technological resources 	• Each service keeps records of staff training and upgrading of competences.

REQUIREMENT	COMPLIANCE
 TSPs must ensure the availability and use of the following resources: a) technical equipment for the efficient delivery of translation projects and for the safe and confidential handling, storing, retrieving, archiving and destroying of relevant data and documents; b) communications equipment, including hardware and software; c) information resources and support; d) translation technology tools, translation and terminology management systems, and other systems for the management of translation-related language resources. 	 Both in-house translators and contractors are required to use eLUNa, a proprietary computer-assisted translation tool with integrated terminology recognition (UNTERM) and machine translation (TAPTA4UN). Also available are document repositories with full-text search capabilities, bitext alignment tools, etc. Project managers use a translation management tool (gDoc). Information technology support is provided.
4. Pre-production processes and activit	ies

REQUIREMENT	COMPLIANCE
4.1 General TSPs must have processes to manage and analyse enquiries, determine project feasibility, and prepare quotations and agreements with clients.	 The Documents Management Section (DMS), which belongs to a separate division of DGACM, and other units are responsible for these functions. Language services have a very limited role, mainly in determining project feasibility in view of available time and human resources.
4.2 Enquiry and feasibility TSPs must analyse client enquiries to identify service specifications and their ability to meet them with the required human and technical	• DMS and other units are responsible for these functions. Language services have a very limited role, mainly in determining project feasibility in view of

resources.	available time and human resources.
4.3 Quotation Unless otherwise agreed with clients, TSPs must send a quotation including price and other details, e.g. language pairs, delivery date, format and support.	• DMS and other units are responsible for these functions. Language services have a very limited role, mainly in determining delivery dates in view of available time and human resources.
4.4 Client-TSP agreement TSPs must formalize an agreement with the client and keep a record of it. If the agreement is verbal, it must be confirmed in writing. Any changes must be agreed by all parties and recorded.	• DMS and other units are responsible for these functions. Language services have a very limited role, mainly in determining project feasibility in view of available time and human resources.
 4.5 Handling of project-related client information TSPs must try to obtain from clients any necessary information on source language content difficulties and other project specifications or instructions, and relay it to all parties involved in the project. 	• Queries about project specifications or special instructions are largely handled by DMS, although project managers, editors and even translators sometimes contact the client directly.
TSPs must have a process to ensure information security and the safe storage and/or destruction of all documents and data received from clients.	• Other units are responsible for these functions.

4.6 Project preparation

REQUIREMENT	COMPLIANCE
Upon receiving source language content, the TSP must confirm that it complies with the previous agreement and project specifications, and contact the client in case of non-compliance.	• In theory, DMS is responsible for this function. In practice, non-compliances are frequently identified by project managers and even translators and editors.

4.6.1 Administrative activities	
 TSPs must maintain a record of each project for its duration, for tracing purposes and to determine the project status. TSPs must assign to each project any internal and/or external resources necessary to comply with the previous agreement and the 	 Projects are recorded and stored in gDoc, which provides traceability and shows all stages of the process. Project managers are responsible for assigning internal/external resources to meet specifications and deadlines. All
specifications, and document all assignments. 4.6.2 Technical aspects of project	assignments are recorded in gDoc.
<i>preparation</i> TSPs must ensure that all parties, including subcontractors, use the technical resources required at every stage of the project.	• Both internal and external translators are required to use eLUNa for translating and gDoc for translation management.
TSPs must perform all necessary technical and preproduction tasks to prepare source language content for translation.	• In most cases, translators receive source language content ready to be processed by eLUNa, but there are exceptions, e.g. PDF documents.
TSPs must ensure that the source language content is analysed to guarantee efficient delivery.	• Source language content is sometimes analysed by the project managers before being assigned to translators. Otherwise, translators themselves analyse it.
TSPs must use the client's style guide when available. TSPs should have their own style rules.	• Clients don't provide style guides, but most language services have their own style rules, and editorial guidelines are often applied to source language content before submitting it for translation.
5. Production process	
REQUIREMENT	COMPLIANCE
<u>5.1 General</u>	
TSPs must ensure compliance with the client-	Not applicable. There is no agreement, just

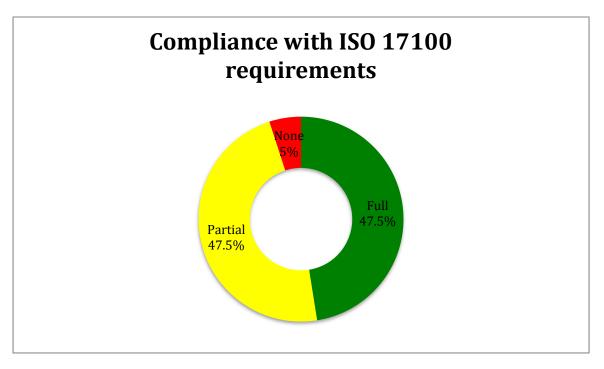
TSP agreement throughout the project.	specifications.
 <u>5.2 Translation service project</u> <u>management</u> Each project must be coordinated by a project manager, who will ensure compliance with production process requirements, TSP procedures, agreements with clients, and other specifications. Project managers must: 	• In all language services, the programming officer manages all translation projects.
a) identify the main project requirements and specifications during pre-production, and follow procedures and specifications throughout production;	• DMS is mostly responsible for pre- production and preparation of the project. Project managers take over during production.
b) supervise and control the preparation of the project;	• DMS is mostly responsible for the preparation of the project.
 c) assign competent translators/revisers to the project; d) communicate information and instructions related to assignment and manage the project for all parties; 	• In all language services, the programming officer is responsible for assigning competent translators/revisers to the project, and for all related communications.
e) control compliance with agreed planning and deadlines;	• Project managers control compliance at all stages.
f) communicate any changes in project specifications;	• DMS is responsible for communicating any changes; project managers then relay the information to translators.
g) supervise compliance with the client-TSP agreement and the specifications, and communicate with all parties involved, including the client;	• DMS is mostly responsible for communicating with clients, although programming officers, editors and even translators are sometimes involved directly in such communications.
h) ensure response to translation and other queries;	• Translation queries are usually addressed to editors. Project managers handle queries related to deadlines and other

	specifications.
i) manage client comments;	• Client comments are relayed by DMS to programming officers and sometimes the chief of service.
j) verify compliance with specifications before approving the target language content and authorizing delivery to client;	• Project managers neither verify compliance with specifications nor approve target language content or authorize delivery. It is not clear to what extent this is done at all by other units.
5.3 Translation process	
REQUIREMENT	COMPLIANCE
 5.3.1 Translation Translators must comply with: a) domain and client terminology and/or reference material, and terminological coherence throughout the translation; b) semantic accuracy of target language content; c) target language syntax, spelling, punctuation and any other orthographic conventions; d) lexical cohesion and phraseology; e) TSP or client style guide, including domain, register and linguistic variants; f) local conventions and applicable standards; g) format; and h) end users and purpose of target language content. 	• As per the relevant standing operating procedure, translators must apply the basic principles of translation, which include accuracy, completeness, fidelity to the source language text, use of an appropriate style and register, use of inhouse terminology and phraseology, consistency with past translations of similar material, and adhering to United Nations editorial standards.
Translators must communicate any queries to the project manager.	• Translation queries are usually addressed to editors. Programming officers handle queries related to deadlines and other specifications.
5.3.2 Check Translators must self-revise the whole target language content to identify semantic, grammar and orthographic issues, omissions and other errors, and ensure compliance with project	• All translations are checked and, if necessary, corrected by the translator before delivery.

specifications. They must make any necessary corrections before delivery.	
5.3.3 Revision	
TSPs must ensure that the target language content is revised by a person other than the translator, who must check it against the source language content to correct errors and other issues, and verify compliance with its intended purpose. The correction process, which may include retranslation, can be repeated until the reviser and the TSP are satisfied of the quality of the target language content. The reviser must inform the TSP of any corrective action performed.	• Only translations done by junior translators are revised by a person other than the translator. Revisers check the target language content against the source language content to correct errors and other issues, and verify compliance with its intended purpose. This process sometimes includes retranslation and is repeated until the reviser is satisfied of the quality of the translation. Corrections are recorded and used for evaluation and training purposes.
5.3.4 Review	
If review is included in the project specifications, TSPs must ensure that the target language content is reviewed to assess its compliance with the agreed purpose and domain. The reviewer can recommend or implement corrections.	• Domain review is rare, but is sometimes provided at the discretion of programming officers and/or the chief of service. Reviewers recommend or implement corrections.
5.3.5 Proofreading If proofreading is included in the agreement and the project specifications, TSPs must ensure that service and correct any issues.	• Proofreading is provided at the discretion of the project managers by text- processors, who implement corrections in consultation with translators.
5.3.6 Final verification and release PMs must perform a final verification of the project against specifications before delivery. If non-compliances are identified, TSPs must correct them.	• Project managers do not verify compliance with the specifications before delivery. It is not clear to what extent this is done at all by other units.

6. Post-production processes	
REQUIREMENT	COMPLIANCE
6.1 Feedback TSPs must have a process for handling client comments, evaluating client satisfaction and implementing corrections and/or taking corrective actions. If corrections are needed, the job will be redelivered to the client. As a best practice, TSPs should share client comments with all parties involved.	• All language services have processes in place for handling feedback and making corrections. Published documents which need corrections are reissued and the reasons recorded. Both positive and negative feedback is shared with all parties concerned.
<u>6.2 Closing</u> TSPs must ensure complete storage of the project for an adequate period of time and comply with all legal/contractual obligations regarding record safekeeping or destruction and data protection.	• Projects are stored securely in gDoc for an adequate period of time, but language services are not responsible for data protection.

Degree of compliance of United Nations language services with the requirements of ISO 17100, as a percentage of total number of requirements.



As the figure above shows, the majority of ISO 17100 requirements are either fully or partially met by the United Nations language services. The only two non-compliances are both related to the requirement that project managers verify that the final product meets specifications before delivery. However, the percentage of partial compliance equals that of full compliance, which is a reason for concern. Most partial compliances can be attributed to other units, mainly DMS, being responsible for functions that, according to ISO 17100, should be performed by project managers in the language services. These functions relate mostly to the stage of pre-production and preparation of the project, but also to changes in specifications and communication with clients. Another important area of partial compliance is the lack of universal revision, while the rest are relatively minor issues relating to the documentation of competences for project managers and the requirements for translators' qualifications, which are stricter in the United Nations than in the standard, and the requirements for data protection, for which, once again, the language services have no responsibility whatsoever.

2. Study of language service providers in the private sector

As mentioned in the methodology, the private sector LSPs that participated in the study were already certified in ISO 17100, as well as in other standards, namely ISO 9001, on quality management; ISO 14001, on environmental management; UNE-EN 15038, the European quality standard for TSPs that was superseded by ISO 17100; and SR 10, on social responsibility management systems.²⁴ As a result, all three providers stated that their

²⁴ See, respectively, https://www.iso.org/iso-9001-quality-management.html; <u>https://www.iso.org/iso-14001-environmental-management.html; http://qualitystandard.bs.en-15038.com</u>; and http://www.iqnet-certification.com/userfiles/001% 20IQNet% 20SR% 2010% 20-% 20Requirements% 20(English).pdf.

working processes had not changed dramatically, but nevertheless mentioned three general areas that had been challenging or required improvement, and which are summarized in table 2 below.

Changes in human resources Stricter requirements for: • translator competences	• There was a need to educate staff about changes in their daily workflow, an issue which is frequently mentioned in the literature on ISO 9000 certification. ²⁵
 revision project management 	 Implementation of external translators rating standards and assessment of competences was very time-consuming, particularly in the case of large agencies which employ thousands of freelancers. One provider had even implemented a new employee review and assessment system. Compulsory revision of every translation was cited as one of the most challenging changes. One of the providers hired a separate project manager for pre-and post-production. Also mentioned was the need to assess the productivity of project managers.
Updating of technical systems	 Some systems had to be adapted, particularly for memory management and pre- and post- formatting.
	• Some providers explained that it was not so much

Table 2. Areas of improvement mentioned by private sector LSPs in regard to ISO 17100.
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²⁵ See, for example, Sanders and Scott (1997, p. 79). In Hoyle's words: "There will be resistance to change and, even when change has been acknowledged as necessary, there will be further resistance to how the change is to be made and who is to be involved" (2011, p. 153).

Better documented processes	the processes that had changed but the way they
Increased traceability	were documented, due to the need for increased traceability of processes.
	• One provider explained that they had implemented a new translation management system that allowed them to gradually move from e-mail based communication to task-related and project-related communication. This change increased transparency and traceability, enhanced teamwork and information exchange, and improved the assessment of customer requirements.

ISO 17100 also covers optional quality services that can be provided at the request of clients. According to the LSPs surveyed, domain review is very seldom requested. Proofreading is more frequent and, as one provider explained, sometimes that service is used as a quality assurance tool, even when the client did not request it, particularly in the case of new clients.

Finally, the synergies between ISO 9001 and ISO 17100 were emphasized by those LSPs who were certified in both standards. One of them stated that, as a result of the requirement to create transparent and identical processes on a global scale, their staff showed increased awareness of the importance of certification and standardization, which ultimately led to improved productivity, more stringent workflows and better products.

Conclusions

ISO 17100 establishes qualifications and professional competences for translators, revisers, reviewers, and project managers, as well as requirements for working processes

throughout the different stages of a project (pre-production, production and postproduction), including management of the entire project; translation and check by a professional translator; in-depth revision by a second linguist; optional domain review and proofreading when the client requests any of these additional services; final verification and release of the translation by a qualified project manager; and safe storage of the final product.

The United Nations language services meet the majority of ISO 17100 requirements either fully or partially. The main areas that are in need improvement include the following:

- a) Translator qualifications for in-house staff required by the United Nations are too strict. According to ISO 17100, five years of full-time professional experience in translation are equivalent to a first-level degree.
- b) Competences for project managers are not documented. Although ISO 17100 does not make formal training compulsory for project managers, it does require some training and that a record of their skills is kept. Competences required include a basic understanding of the translation industry, a thorough knowledge of the translation process, and project management skills. Currently, none of the language services in the Division is in compliance with the standard. Project management is a key, cross-cutting function essential for achieving quality; however, it seems to be assigned and performed throughout the Division in an ad-hoc manner that is not conducive to the harmonization and improvement of working processes.
- c) Most partial compliances involve the pre-production stage and the preparation of the project, as well as direct communication with clients and communicating changes in specifications. This is mainly due to the fact that

other units, in particular DMS, have responsibilities that, according to ISO 17100, should be discharged by the project managers of the language services. At present, each language service has only one project manager, i.e. the programming officer, and it is obvious than one person could never be responsible for all the tasks that are currently carried out by several people, even whole units. However, the project management function could be more broadly defined, to include staff of different levels and qualifications depending on the task to be performed. On the other hand, project management functions are often duplicated in the current workflow the lack of clear-cut responsibilities structure. where impedes communication and unnecessarily complicates delivery. The project management functions assigned to different units should be clarified and more robust communication channels should be established, in order to avoid wasting valuable resources.

d) Not all translations are revised, whereas the standard requires universal revision. This is a challenging area even for private sector LSPs. On the other hand, the United Nations language services provide proofreading, which is optional according to ISO 17100. It would seem that proofreading is used as a quality assurance tool to compensate for the lack of revision, at least in some cases. This is a complicated issue, since the language services use revision mainly for training purposes, in order to improve the work of junior translators. Therefore, a broader rethinking would be needed in order to align this aspect of the workflow with the requirements of the standard and the best practices of the industry.

- e) Project managers should verify that the final product meets specifications and approve target language content before delivery. Once again, project management functions could be defined more broadly, to include staff of different levels and qualifications depending on the task to be performed.
- f) Data protection responsibilities should be clarified, in order to fully meet the requirements of the standard.

Some lessons that can be learned from the certification experience of LSPs in the private sector include:

- a) The possibility of using dedicated systems and/or project managers for preand post-production tasks. The specialization of project managers is a growing trend in many industries, including translation, and specialized project managers are an excellent way to ensure quality and assign new responsibilities to underutilized staff of different levels;
- b) The need to educate staff about the importance of standardizing processes as a way to improve productivity, workflows and the final product;
- c) The change from e-mail based communications to project-related communications, as a means to enhance transparency and traceability, teamwork and information exchange. This would require improvements in the translation management systems of the Documentation Division, which at the present moment do not allow for project-related communication among all the parties involved.

Annex - Questionnaires

Table 1. Questionnaire for United Nations translation services.

PRE-PRODUCTION STAGE

- Do you ever try to obtain information about content difficulties, instructions on terminology, etc., from DMS or the client? What kind of information would you like to have in gDoc? Possible specifications: text type, genre, intention/purpose of text (inform, command, persuade) audience or end user, specialized language, domain (law, finance), aspects of ST likely to make the project difficult (graphics, degree of legibility), unusual terminology/terminology requirements from client, degree of literality required of translation, regionality, register.
- 2. Do you check to see if the ST is as described in the specifications?
- 3. Are there requirements for all translators/revisers (both in-house and external) to use certain technical resources?
- 4. Do you have a style guide? How do you enforce it? Do you have different instructions for different types of documents (e.g. depending on end-user/purpose)?
- 5. Is the ST analysed before assigning it? Do you pre-translate, create specific TMs or terminology/glossaries, or provide reference material?

PRODUCTION STAGE

- 6. What kind of information does the PO communicate to translators/revisers?
- 7. Does the PO supervise the project? How? Who can be PO (qualifications/training)?
- 8. How do you ensure that competent translators/revisers are assigned to the project? Do you keep a repository of qualifications?
- 9. Does the PO issue information/instructions specific to each project? Examples?
- 10. Do you verify that the final TT complies with specifications? How are non-compliances corrected?
- 11. Do you ever provide domain review?
- 12. How is coherence (terminology, style) ensured when jobs are divided?
- 13. What kinds of questions do you get from translators/revisers? Do you communicate their queries to DMS or do they contact editors/COs directly?
- 14. How are corrections implemented?

15. What considerations determine if a job will be revised or self-revised? Is proofreading or lack thereof taken into account?

POST-PRODUCTION STAGE

- 16. How is client feedback handled? Is positive/negative feedback documented? Who implements corrections?
- 17. Are comments on errors shared with all interested parties?
- 18. Are term-bases, style manuals/instructions or TMs updated after receiving feedback from clients?

Table 2. Questionnaire for United Nations editing services.

	PRE-PRODUCTION STAGE	
1.	How are decisions about which documents to edit taken?	
2.	Do you ever try to obtain information about content difficulties, instructions on terminology, etc., from DMS or the client? What kind of information would you like to have in gDoc? Possible specifications: text type, genre, intention/purpose of text (inform, command, persuade) audience or end user, specialized language, domain (law, finance), aspects of ST likely to make the project difficult (graphics, degree of legibility), unusual terminology/terminology requirements from client, degree of literality required of translation, regionality, register.	
3.	Do you check to see if the ST is as described in the specifications?	
4.	Are there requirements for all editors (both in-house and external) to use certain technical resources?	
5.	Do you have a style guide? How do you enforce it? Do you have different instructions for different types of documents (e.g. depending on end-user/purpose)?	
6.	Is the ST analysed before assigning it? Do you request specific terminology/glossaries, reference material?	
	PRODUCTION STAGE	
7.	What kind of information does the PO communicate to editors?	
8.	Does the PO supervise the project? How?	

9. How do you ensure that competent editors are assigned to the project? Do you keep a

repository of qualifications?

- 10. Does the PO issue information/instructions specific to each project? Examples?
- 11. Do you verify that the final TT complies with specifications? How are non-compliances corrected?
- 12. Do you ever provide domain review?
- 13. How is coherence (terminology, style) ensured when jobs are divided?
- 14. Do editors send questions to the PO? Does the PO communicate their queries to DMS or do they contact the COs directly?
- 15. How are corrections implemented?
- 16. Are edited/non-edited texts proofread?

POST-PRODUCTION STAGE

- 17. How is client feedback handled? Is positive/negative feedback documented? Who implements corrections?
- 18. Are comments on errors shared with all interested parties?
- 19. Are term-bases, style manuals/instructions or TMs updated after receiving feedback from clients?
- 20. What do you think is the ideal way to handle queries from TSs?

Table 3. Questionnaire for private sector ISO-certified LSPs.

- 1. What was the most challenging part of the certification process?
- 2. Did any or your working processes change dramatically after certification?
- 3. Which working processes changed the most?
- 4. What optional quality services do you provide most frequently at the request of clients?
- 5. If you are also ISO 9001 certified, what was the main difference between both certification processes?

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