Hacettepe University Graduate School of Social Sciences
Department of Translation and Interpreting

TRANSLATION QUALITY ASSESSMENT OF TSE STANDARDS IN THE FIELD OF CONSTRUCTION TRANSLATED FROM ENGLISH INTO TURKISH: EXAMINING THE EFFECT OF COMMISSION IN THE LIGHT OF SKOPOS THEORY

Betül KOÇER

Master's Thesis

Ankara, 2018

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ACCEPTANCE AND APPROVAL

The jury finds that Betül KOÇER has on the date of January 10, 2018 successfully passed the defense examination and approves his/her Master's Thesis titled "Translation Quality Assessment of TSE Standards in The Field of Construction Translated from English into Turkish: Examining the Effect of Commission in the Light of Skopos Theory".

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O **Serbest Seçenek/Yazarın Seçimi**

10/01/2018

Betül K

Betül KOÇER

ETİK BEYAN

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ÖZET

KOÇER, Betül. *İnşaat Alanındaki İngilizceden Türkçeye Çevrilmiş TSE Standartlarının Çeviri Kalitesinin Değerlendirilmesi: Skopos Kuramı Işığı Altında Komisyonun Etkisinin İncelenmesi*, Yüksek Lisans Tezi, Ankara, 2018.

Hızla küreselleşen dünyada, seri üretime duyulan ihtiyaç standartların ve çevirilerinin gerekliliğini arttırmıştır. Türkiye'nin milli standardizasyon kuruluşu olan Türk Standartları Enstitüsü (TSE), 2016 yılında çeviri politikasında radikal bir değişikliğe gitti ve bunun sonucunda yeni bir standart hazırlama ve çeviri kılavuzu ortaya çıktı. Bu kılavuz, Skopos kuramına göre çeviri komisyonu olarak adlandırılmaktadır. Bu çalışma, ortaya çıkan bu kılavuzun sonucunda standartların çeviri kalitesinde bir artış olup olmadığını belirlemek için 2016 yılından önce ve 2016 yılından sonra İngilizceden Türkçeye çevrilmiş standartların kalitesini değerlendirmeyi amaçlar. Bu amaçla, 2016 yılından önce çevirisi yapılmış, rastgele seçilen 10 inşaat standardından oluşan Derlem 1 (D1) ile 2016 yılından sonra çevirisi yapılmış, rastgele seçilen 10 inşaat standardından oluşan Derlem 2 (D2), *Multidimensional Quality Metrics (MQM)* (Lommel, Burchardt & Uszkoreit, 2015) çeviri kalitesi değerlendirme modeline göre değerlendirildi. Her bir korpusta bulunan çeviri hataları bu modelin on yedi farklı hata türüne göre sınıflandırıldı ve önem derecesine göre değerlendirildi. Çeviri komisyonunun 2016 yılında takdim edilmesinden sonra D2'nin çeviri kalitesinde herhangi bir artış olup olmadığını tespit etmek amacıyla D1 ve D2'nin çeviri kalitesi analizlerinin sonuçları karşılaştırıldı. Nicel veri analizi, D1'de 544 çeviri hatası olduğunu, D2'de ise hata sayısının 314'e düştüğünü ortaya çıkardı. İstatistiksel analiz, komisyonun varlığının çeviri kalitesini önemli ölçüde artırdığını ortaya koydu. Niteliksel analiz ise, iki korpus arasındaki hata şablonunun farklı olduğunu ortaya çıkardı: D1'de çeviri hataları, hata kategorine istatistiksel olarak homojen bir şekilde dağılmışken, D2'de hataların büyük bir kısmı *Fluency [akıcılık]* kategorisinde kalmıştır. Bu durum 2016 tarihli kılavuzun özelliklerine dayandırılabilir. Sonuç olarak, bu çalışma, çeviri komisyonunun varlığının çeviri kalitesini arttıracağı konusunda kanıt sunar ve Vermeer'in, çeviri sürecine başlamadan önce tercümanlara düzgün tanımlanmış bir çeviri komisyonu verilmesinin çeviri kalitesini arttırdığı fikrini destekler.

Anahtar Kelimeler

Çeviri Kalitesi Değerlendirmesi, Multidimensional Quality Metrics (MQM), Skopos Kuramı, Standartlar, Teknik Çeviri

ABSTRACT

KOÇER, Betül. *Translation Quality Assessment of TSE Standards in the Field of Construction Translated from English into Turkish: Examining the Effect of Commission in the Light of Skopos Theory*, Master's Thesis, Ankara, 2018.

In the rapidly globalized world, the need for mass production has increased the necessity for standards and their translations. National standardization body of Turkey, Turkish Standards Institution (TSE), went through a radical change in translation policy in the year of 2016, which resulted in the introduction of a new standard developing and translation guide, which is a *commission* in terms of Skopos theory. The present study aims to evaluate the quality of standards translated from English into Turkish after and before the year of 2016 to determine where there has been an improvement in the translation quality of standards as a result of the innovation. For this purpose, corpus one (C1) consisting of 10 randomly chosen construction standards translated before the year of 2016 and corpus two (C2) consisting of 10 randomly chosen construction standards translated after the year of 2016 were evaluated according to *Multidimensional Quality Metrics* (MQM) translation quality assessment model (Lommel, Burchardt & Uszkoreit, 2015). Translation errors found in each corpus were classified according to seventeen error types of this model and weighting according to their severities. The results of translation quality analysis of C1 and C2 were compared to find out whether there was any improvement in translation quality of C2 after the introduction of the commission in the year of 2016. The quantitative data analysis revealed that there were 544 instance of translation error observed in C1, while in C2, the number of error decreased to 314. Statistical analysis revealed that the introduction of the commission has significantly improved translation quality. The qualitative analysis revealed that the error patterns differed between the two corpora: in C1 translation errors statistically distributed uniformly over categories while in C2 the majority of the errors were left in the category of *Fluency*, which could be attributed to the peculiarities of the guideline of 2016. As a result, the present study provides a piece of evidence that the presence of commission is likely to enhance the quality of

translation and supports the view of Vermeer that a translator should be provided with a properly defined commission before starting the process of translation.

Key Words

Translation Quality Assessment, Multidimensional Quality Metrics (MQM), Skopos Theory, Standards, Technical Translation

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LIST OF ABBREVIATIONS

AC:	Accuracy
C1:	Corpus 1
C2:	Corpus 2
CEN:	European Committee for Standardization
CENELEC:	European Committee for Electrotechnical Standardization
CR:	Critical
DE:	Design
EN:	European Standards
FL:	Fluency
HD:	Harmonization Documents
IEC:	International Electrotechnical Commission
IPTV:	Internet Protocol Television
IS:	International Standards
ISO:	International Organisation for Standardization
ITU:	International Telecommunication Union
JTC1:	Joint Technical Committee 1
MA:	Major
MI:	Minor
MQM:	Multidimensional Quality Metrics
MT:	Machine Translation
PAS:	Publicly Available Specifications
QA:	Quality Assessment

SDOs:	Standards Development Organisations
SL:	Source Language
ST:	Source Text
TDK:	Türk Dil Kurumu
TL:	Target Language
TR:	Technical Reports
TS:	Technical Specifications
TSE:	Turkish Standards Institution
TT:	Target Text
UNIDO:	United Nations Industrial Development Organization

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INTRODUCTION

I. GENERAL REMARKS

Translation is a tool of communication which bridges the gap between people from different cultures, speaking different languages. In the rapidly globalized world, the need for communication has necessitated translation more than ever before. Globalization of the new era has also necessitated common norms and patterns which are likely to facilitate human life. The necessity of these common norms and patterns has initiated standardization with which a consensus among people of the world can be established. Standards can in general terms be materials or services that thanks to certain norms become recognizable for both a sender and a receiver when they talk or think about them. Main European standard bodies define a text of standard as "a document, established by consensus and approved by a recognized body, that provides for common and repeated use, rules, guidelines or characteristics for activities or their results, aimed at the achievement of the optimum degree of order in a given context" (ISO/IEC Guide 2, 2004, definition 3.2). Standardization is the activity of establishing and applying standards in various fields. Standardization plays a critical role not only in establishing markets for products and services but also in facilitating and regulating trade and industry. Standards allow people to live in a collective harmony within societies just as translation does. Both of them facilitate the human life by bridging the gap between people and activities of them.

National standardization body of Turkey, Turkish Standards Institution (TSE), went through a radical change in translation policy in the year of 2016, which resulted in the introduction of a new standard developing and translation guide, which is defined as the commission in terms of Skopos theory.

Vermeer, the author of Skopos theory (2004) defines the commission as "the instruction, given by oneself or by someone else, to carry out a given action: here to translate" (p. 235) and puts forward that well-defined commission contributes to the quality of a translation and helps a translator to fulfill the requirements related to the

purpose, function of the translation as well as the needs of a target reader and culture. However, in practice translators are not commonly provided with a commission but just given an instruction to translate a document and at best a previously translated parallel text. To this end, the present study aims to examine the effect of the commission on quality of the translations of standards.

II. PURPOSE OF THE STUDY

The present study aims to analyze and compare the quality of standards in the field of construction translated before and after the year of 2016, when the commission was introduced at TSE, in order to find out whether the presence of translation commission has an effect on the translation quality.

III. RESEARCH QUESTIONS

The present study seeks to answer the following questions:

1. To what extent are the translations of standards before the year 2016 compatible with the function of informative texts and peculiarities of standards?
2. To what extent are the translations of standards after the year 2016 compatible with the function of informative texts and peculiarities of standards?
3. Is there a significant difference between the translation quality of standards translated before the year of 2016 and after the year of 2016?

IV. METHODOLOGY

a. Data Collection

The present study evaluates the translation quality of chosen standards that were published by Construction Specialized Board and translated from English into Turkish by technical committees affiliated to Construction Specialized Board before and after the year of 2016.

The study comprises two corpora. The first corpus (C1) consists of 10 standards (each min. 10 and max. 30 pages) translated before the year of 2016 and chosen randomly out

of 62 standards. The second corpus consists of 10 standards (each min. 12 and max. 57 pages) translated after the year of 2016 and chosen randomly out of 30 standards.

b. Data Analysis

Multidimensional Quality Metrics (MQM) translation quality assessment model (2015) was used to identify error rates and error patterns available in translations, as well as their weightings, which would allow us to reflect on the translation quality of C1 and C2.

MQM translation quality assessment model provides, "a framework for describing and defining quality metrics which used to assess the quality of translated texts and to identify various translation errors in translated texts" (Lommel, Burchardt & Uszkoreit, 2015a). The model includes weighing system for translation error categories as minor, major and critical, which are defined as "a numerical indication of how important a particular error type is in overall quality assessment" (Lommel et al., 2015b).

Further, qualitative and quantitative analyses were used to compare the corpora to see whether there is a significant difference in error rates and patterns between them.

To assure the reliability of the results obtained in the data analysis, the inter-rater reliability was provided. For this purpose, an expert who is a professional translator working for TSE was requested to analyze one of the standards in the field of construction chosen randomly according to MQM Model. The percent agreement between the expert and the researcher was determined as 86%.

V. LIMITATIONS

The main limitation of the study is that it is restricted to the analysis of 20 standards all of which are from the field of construction. That is why the results obtained in this study should be generalized with caution and heed further validation.

VI. ORGANIZATION OF THE STUDY

The present study begins with the Introduction, ends with the Conclusion, and comprises three main chapters.

The Introduction presents general remarks related to the subject of the study and provides information about the purpose, research questions, methodology, and limitations of the study.

Chapter 1 provides a literature review on theoretical background to the study. It briefly explains Skopos theory, which is one of the prominent theories of translation studies and provides information about peculiarities of translating technical texts and translation of standards. It also presents an overview of translation quality assessment models and Multidimensional Quality Metrics (MQM) translation quality assessment model with its core error categories, which was used to assess translation quality of standards.

Chapter 2 presents definition of standards and briefly clarifies the history of standardization and standardization organizations. It also addresses features of Turkish standards by touching upon their linguistic, stylistic and contextual features, which play an important role in the translation quality assessment process and explains the field of construction on which the translation quality analysis of this study is based.

Chapter 3 presents the analysis of translations of Turkish standards translated from English into Turkish, the quality of which was examined according to the Multidimensional Quality Metrics (MQM) translation quality assessment model. This chapter provides analyses of standards in two corpora. The first corpus presents the analysis of the standards which were translated from English to Turkish before the year of 2016 and the second presents the analysis of the standards which were translated after the year of 2016. It later compares the results related to the quality of the translation of these two corpora and discusses them in terms of their rates and their weightings, i.e. minor, major, and critical. Lastly, it provides a discussion part in which the research questions of the study answered in line with the results obtained from the data analysis of the study.

The Conclusion summarizes the findings of the study regarding the data analysis conducted throughout the study.

CHAPTER 1
THEORETICAL BACKGROUND TO THE STUDY

This chapter presents a theoretical background to the study. Firstly, Skopos theory, which is one of the prominent theories of translation studies, will be explained briefly. Secondly, peculiarities of translating technical texts and translation of standards, in particular, will be provided. Finally, an overview of translation quality assessment models and Multidimensional Quality Metrics (MQM) translation quality assessment model, which was used to assess the translation quality of standards along with core error categories of MQM, will be presented.

1.1. A GENERAL REVIEW OF SKOPOS THEORY

The 1970s and 1980s were marked with a move away from linguistic approaches to translation studies and the emergence of functionalist theories in translation studies. One of them and probably the most prominent functional theory was Skopos theory which was developed in Germany in the late 1970s by Hans J. Vermeer and which became a milestone in the translation theories. The word "Skopos" was used as a technical term to refer to the aim and purpose of a translation (as cited in Venuti, 2000, p. 221). Firstly postulated in an essay published in *Lebende Sprachen* (Vermeer, 1978) Skopos theory viewed translation "not as a process of transcoding, but as a specific form of human action which is determined by its purpose" (Schaffner, 2008, p. 117). To this end, Skopos theory challenged all the linguistic approaches to translation studies and reconceptualized the status of the source text (ST), as it is "no longer the first and foremost criterion for the translator's decisions; but just one of the various sources of information used by the translator" (Nord, 1997, p. 25).

Skopos theory comprises five rules, which stand in hierarchical order, with the skopos rule as predominating. Vermeer formulated the skopos rule as "a translatum (or TT) is determined by its skopos", that is the intended purpose of a target text appears to be a decisive factor determining translation methods and strategies. The second rule of Skopos theory states that "it is an offer of information (Informationsangebot) in a target

culture and TL concerning an offer of information in a source culture and SL" and refers the ST and TT to their function in their respective linguistic and cultural contexts. Along with it, Rule 2 emphasizes the role of a translator as the key player in a process of intercultural communication and production of the Translatum and shifts the role of ST and SL from the primary position to a secondary position as an information source rather than a source that should not be changed. According to Rule 3 of Skopos theory, a TT does not initiate an offer of information in a clearly reversible way, which implies that the function of a TT in the target culture is not necessarily the same as the ST in the source culture. Rule 4 and Rule 5 of Skopos theory state that a TT must be intertextually and intratextually coherent with the ST. Intertextual coherence refers to the coherence between the ST information, the interpretation the translator makes of this information and the information that is encoded for the TT receivers. Intertextual coherence is determined by the translator's understanding of the source text (after consulting the source-text producer, if necessary) and by the Skopos governing the translatum (Reiss & Vermeer, 2013, p. 102). This rule depends on how the translator comprehends both the ST and purpose of the TT. If a translator can understand the ST and apply the skopos of TT to his/her translation, then we can say that the intertextual coherence (or fidelity) rule of Skopos theory is rendered in that translation process. The fidelity rule of Skopos theory concerns intertextual coherence between the translatum and the ST and postulates that if translatum fulfills the skopos of the target reader and culture, it can be achieved a faithful translation. In this respect Vermeer (1978) underlined that "the text has to be translated into a target language in such a way that it becomes part of a world continuum that can be interpreted by the recipients as coherent with their situation (as cited in Schaffner, 2008, p. 117). Intra-textual coherence is seen more important than intertextual coherence by Vermeer, who stresses that translatum must be coherent first in itself and then with the ST, because a translation is conducted to the target culture, therefore it needs to meet the expectations and needs of the target culture and the target reader rather than the source culture. Therefore, the translator, as an expert, has to conduct his/her translation process and give his/her decision in compliance with the aim of target reader rather that the aim of the source text and culture. In this sense, Skopos theory does not set rules on translation process and translators, but assert visibility of the translator and supports decision-making strategies in the process of translation. It

devotes the translator freedom along with putting emphasis on the role of a translator in the process of translation.

1.1.1. Translation Commission

The skopos or purpose of a translation is defined by its commission, which comprises not only the goal but also the conditions under which that goal should be achieved (including deadline and fee). Vermeer (2004) defined the commission as "the instruction, given by oneself or by someone else, to carry out a given action- here: to translate" (p. 229). For instructions given to a translator, Vermeer (1989) uses the term *commission*, while Pöchhacker (1995) and Kussmaul (1995) use the term *assignment* and Nord (1997) uses the term *translation brief*. Similarly to Vermeer, Nord (1997) suggests that "translation brief specifies what kind of translation is needed" and therefore should define the purpose, the addressees, medium of the intended communication, the function the text, time, place and occasion (pp. 29-30).

The commission should be determined before the translation process begins; and it can be determined by either a translator's himself or by an initiator i.e. a client. According to Vermeer, in both cases a translator acts in accordance with a "commission" (Vermeer, 2004, p. 229). A translation action can be started by a client, an author or with a general term by an "initiator". In this term, an initiator is a person or legal entity who initiates the process of translation because he wants the ST to be translated. Holz-Mänttäri (1984) distinguishes between the initiator and commissioner: initiator who actually needs the target text and the commissioner is who asks the translator to produce a target text for a particular purpose and addressee (similarly Vermeer, 1986) (as cited in Nord, 1997, p. 20).

According to Skopos theory, adequacy comes to override equivalence as the measure of the translatorial action (Vermeer, 2004, p. 229). Skopos theory considers a translator as an expert who can determine the adequacy of the goal of translation to the commission, ST, TT or intended target reader. Since the commissioner normally does not know the needs of the target culture, the translator here should be able to make argumentative suggestions. Conditions agreed on between a translator and a commissioner determine

the way a skopos is put into practice and the translation methods and strategies. To give an example from literature, the novel of *White Fang* written by Jack London has been translated for children in another language. In this case, the initiator (the commissioner) can be children of a target culture, the author's himself, the author's family, a publishing house or the translator. This translation process was conducted under the condition of "translating for children", in this case the skopos of the translation was determined by the commissioner and the translator who accepted the work. The skopos of the ST and the TT was totally different from each other.

To give a further example, a European standard about a power tool needs to be translated into Turkish. In this case, the ST is a European standard of a power tool working in Europe, the TT is a Turkish standard which must work in Turkey; whereas the commission is a Turkish Standards Translation Guide and the commissioner can be a private company, an agent from the government, TSE's itself or the translator. The purpose of such translation can be the same with the purpose of the ST but can be different, as well. In such a case, the role of the translator is important to decide the methods and strategies of the translation process. Because of the cultural and regional differences, the power tool may not work in Turkey, i.e. because of the differences of electric potential. The translator, as an expert, should apply the commission (a translation guide in this case) and take into consideration the skopos of the translation and expectations of the target culture.

1.1.2. Text Types and Skopos Theory

The text type is another important concept which should be taken into consideration according to Skopos theory. Since texts may differ in terms of their function, genre and informational load, text types emerge as a crucial factor determining the whole process of translation, or to put it in different words "the text type and the purpose of a text justifies the translation method and strategy" (Nord, 2006, p. 1). In this respect Nord (1997) suggested that the knowledge of "text-type classifications sharpen the translator's awareness of linguistic markers of communicative function and functional translation units" (p. 38). Reiss defined four main text types, which are informative,

expressive, operative and audio-medial texts, and established an interrelation between text typology and translation.

1. *The informative text* is the type, which aims to inform the reader on a subject or phenomena in the real world (p. 37), it is a tool for communication of facts, information, knowledge, opinions, etc. Due to the informative nature of its function, the linguistic features are to be in subsidiary position comparing with the function and language dimension used to transmit the information. The language of translation should explicit, logical or referential, as well as the content or 'topic' should be the main focus of the communication. To put it in different words:

> In a translation where both the source and the target texts are of the informative type, the translator should attempt to give a correct and complete representation of the source text's content and should be guided, in terms of stylistic choices, by the dominant norms of the target language and culture. (Nord, 1997, p. 38)

2. *The expressive text* type is the type which is featured by aesthetic components and written with the aim of expressing ideas, reflecting the mental state of an author (ibid). In expressive texts the author uses the aesthetic dimension of language; therefore, the intended aesthetic effect of ST has to be taken into account in translation by a translator. In this case, stylistic choices in translation are naturally guided by those made in the source text.
3. *The operative text* is the third type of Reiss's text typology. The aim of the appellative function is to appeal to or persuade the reader or 'receiver' of the text to act in a certain way (Munday, 2008, p. 72). In translating this text type, it is important to convey the same function of the ST to the TT. In case of translating an operative text into an operative text, the task of the translator is to create the same reaction in the audience with preserving or recreating the stylistic features of the original.
4. *The audio-medial text* is the fourth type which involves films and visual and spoken advertisements, which supplement the other three functions with visual images, music, etc. Reiss pointed out that the audio-medial text is a 'hyper-type'

> which is superimposed over the three other basic types, each of which may occur in the form of a multimedial text (Reiss & Vermeer, 2013, p. 187).

The aim of the study is to assess translation quality of standards, which involve the group of informative texts according to Reiss's text typology. In the light of the Reiss's typology, we can say that standards belong to informative text type due to the fact that their skopos is to inform a reader on various subjects. With respect to this, translations of standards will be assessed by taking into consideration the function of informative text type.

1.2. A REVIEW OF TECHNICAL TEXTS AND STANDARDS

With the advent of technology, human activities gained a new pulse in the business area. Both inventions and innovations have been carried into practice by the professionals with the aim of both making money and facilitating the life of the human being. The technology and innovations let the production of a wide variety of documents that need to be used before the production phase and after it. All of these documents are called "technical texts". Technical texts are in the category of informative texts. When translating these type of texts, "referential content elements will receive the highest priority from among all the equivalence criteria; other equivalence requirements (e.g. aesthetic values) will then take their place at lower levels" (Byrne, 2006, p. 68)

Byrne defined some important points that need to be taken into account when translating technical texts:

> 1. We need to concentrate on the needs of the target audience this is who the translation is produced for and these are the judges of whether a translation is actually good or not;
> 2. We need to understand what it is the target audience needs and wants;
> 3. We need to understand how technical communication works in the target language if we are to produce independent. Autonomous texts that can "compete" with other texts produced in that language;
> 4. We need to remember that it is necessary to add, change or remove information as part of the translation process in order to achieve effective communication via a technical text. (Byrne, 2006, p. 45)

According to many scholars and authors, there is a clear distinction between technical (also named as scientific) and literary text and their translations. Kloepfer (1967) set a line to separate literary translation from the translation of scientific and technical texts. According to him, "the aim of scientific translation is the semantically identical reproduction of one functional or conceptual system by means of another, equivalent, system" (as cited in Reiss & Vermeer, 2013, p. 40). On the other hand, a literary text is generally defined as a form of expressions of a source author, and these expressions can be translated how a translator perceives them. Similarly, Markel (2010) says that "technical communication is not meant to express a writer's creativity or to entertain readers; it is intended to help readers learn or do something" (p. 8). This explicitly sets the difference between technical text and literary text: a technical document is produced to inform the reader, while a literary text can be produced to be liked by the reader, and/or to entertain the reader and it usually has an aesthetic value. In this sense, a literary text can be translated in compliance with the aim of the ST, while a technical text is translated to inform. If a technical text that produced for experts in a source culture needs to be translated for experts in a target culture, the equivalence between the ST and the TT is expected to be saved. However, sometimes a technical text needs to be translated for a different audience. In this case "if a technical text is popularized for a wider audience of non-experts, textual equivalence can no longer be the aim" (Reiss & Vermeer, 2013, p. 126). Translation of the same technical text written for experts of a source culture can be conducted as more simply (for the terminology) and in such a way that it will allow them to understand the text rather than in a way they need to study on it as an expert.

1.3. A GENERAL REVIEW OF TRANSLATION QUALITY

A theory of translation usually debates over the concept of translation quality. According to Juliane House (1997), who contributed to the subject translation quality assessment, translation quality assessment is at the heart of any theory of translation (p. 29). Translation quality assessment had become one of the important topics of public interest especially with the advent of technology and blooming need for translation. Lauscher (2000) argues that this need may explain both the growing number of

initiatives relating to quality and quality assessment on the international level (e.g. ISO certification of translation businesses) as well as the national level (e.g. DIN 2345 on organizing translation projects) (p. 149).

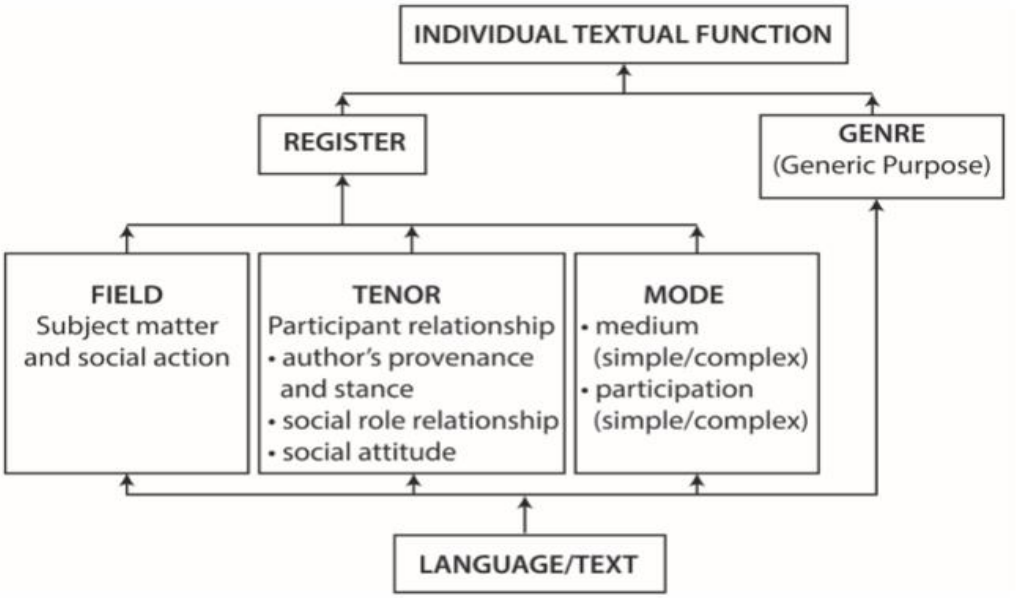
It has been constantly pointed out by scholars that any process of translation has to result in a translation of good quality. However, according to which criteria a product of translation is named as a "good" or "bad" translation? With the aim to evaluate the quality of translation, many discussions have been made and various approaches have been postulated by various scholars and theoreticians.

One of the scholars contributed to the translation quality assessment is Juliane House, who initially proposed her model of translation quality assessment in 1977 and later updated it in 1997. House's quality assessment model is based on analysis of a text. The Model of House provides strategies for text analysis and comparison of an original text and its translation on two levels, which are Register (Field, Mode and Tenor) and Genre. According to House in the register section, a text analysis is determined; in the genre section, thw text type of the text is determined. At the end of these steps, the function of the text and so quality of the text can be defined. Her revisited model (1997) was based on the classic 'field', 'mode' and 'tenor' concepts of the Hallidayan Systemic-Functional Theory (1989). She defines field, mode and tenor as follows:

> Field refers to the topic, the content of the text or its subject matter. Tenor refers to the nature of the participants which are the addresser and the addressees. Mode refers to both the channel – spoken or written and the degree to which potential or real participation is allowed for between author and audience. (House, 2014, p. 251)

According to House (1977), the equivalence should be searched in equivalence of the function, in other words, if the function of the ST and the TT is common, then the TT can be assumed as a good equality translation. The function of the text can only be made explicit through a detailed analysis of the text. For House, this detailed text analysis is effective when it is conducted only according to the above-mentioned steps, i.e. register and genre. A scheme for textual analysis, comparison and assessment postulated by House (1997) is as follows:

Table 1. An Overview of the Translation Quality Assessment Model of House (1997)



The analysis provided in the revised model (1997) for translation quality assessment includes language/text, register and genre sections, which render a textual profile that characterizes the textual function. This textual function can determine the strategy of translation, and a translation quality assessment can be conducted by considering the strategy of translation and determined function of it.

To this end, she postulates two different translation strategies, which are related to the function of a text and contribute to assessing translation quality: overt and covert translation. House defines overt translation as "one which must overtly be a translation, not a 'second original'; the receptors of the translation are quite overtly not being addressed" (House, 2014, p. 252). Thus, as we can infer that in overt translation the translator should try to reproduce the function of the ST by trying not to go far from the ST. Therefore, a translator needs to be visible in overt translation. House explains the role of the translator in this kind of translation strategy as to target culture members in an observer position in overt translation (p. 254). As for the covert translation, "a translation which enjoys the status of an original source text in the target culture, thus it is a strategy whose source text is not specifically addressed to a particular source audience […]" (ibid). As we can infer that in covert translation, the translator should try to reproduce the function of the ST by adapting the TT to target culture's needs.

Therefore, a translator needs to be less visible in covert translation. House explains the role of translator in this translation strategy as “the translator’s task is to betray the origin, to hide behind the transformation of the original, necessary due to the adaptation to the needs and knowledge levels of the new target audience” (ibid). To sum up, according to House, in translation quality assessment, it is essential to take into account the fundamental differences between these two types of translation strategies. It is clearly seen that according to House, the “function” of a text is the main criterion which determines a translation and it quality.

Another scholar that contributed to the issue of translation quality is Antony Pym. Pym considers translation evaluation in the perspective of translation teaching and learning, and states that the identification and analysis of translation errors require formalization of the problems to be dealt with (Pym, 1992, p. 279). He proposed a definitional framework for empirical research conducted in translation classes or institutions. According to his analysis method, binary and non-binary errors are the main assessing criteria of translation quality. Binary errors refer to those translation mistakes which are clearly wrong; on the other hand, non-binary errors refer to inadequate translations at some level. Pym asserts that these errors as “the correction of binary errors belongs to the language class and that of non-binary errors to the translation class” (ibid). In short, Pym suggests that the analysis of binary errors and non-binary errors in a translated text (when a ST and a TT is compared) can facilitate the assessment of a translation.

Brian Mossop is another scholar who studies translation evaluation from the perspective of translation teaching and learning. Mossop (2014) defines translation quality as “a set of inherent characteristics that fulfills requirements” (p. 22) with ‘requirements’ he means ‘needs and expectations from a text’. Mossop argues that there is no such a thing as absolute quality, since the texts are meeting different needs. According to him, the most important criterion to ensure quality in a translation is to establish a successful communication on conveying the message of the text to the readers. For Mossop, achieving this communication requires an editor or reviser to override the publisher’s or client’s instructions (a brief or a commission). For this reason, Mossop (2001, 2007) designated some revision parameters for the revisers and editors (people who assesses translation quality) as follows:

Group A – Problems of meaning transfer (Transfer)

1. Does the translation reflect the message of the source text? (Accuracy)
2. Have any elements of the message been left out? (Completeness)

Group B – Problems of content (Content)

3. Does the sequence of ideas make sense? Is there any nonsense or contradiction? (Logic)
4. Are there any factual, conceptual or mathematical errors? (Facts)

Group C – Problems of language and style (Language)

5. Does the wording flow? […] (Smoothness)
6. Is the language suited to the users of the translation and the use they will make of it? (Tailoring)
7. Is the style suited to the genre? Has correct terminology been used? […] (Sub-language)
8. Does the translation observe the rhetorical preferences of the target language? […] (Idiom)
9. Have the rules of grammar, spelling, punctuation, house style and correct usage been observed? (Mechanics)

Group D – Problems related to the visual rather than verbal aspect of the text (Presentation)

10. Are there any problems in the way the text is arranged on the page: spacing, indentation, margins, etc.? (Layout)
11. Are there any problems related to bolding, underlining, font type, font size, etc.? (Typography)
12. Are there any problems in the way the document as a whole is organized: page numbering, headers, footnotes, table of contents, etc.? (Organization) (Mossop, 2014, pp. 134-135)

These twelve revision parameters for translation quality are suggested by Mossop with the aim of classification of the types of errors in the process of practical translation quality assessment.

Another translation quality assessment model was developed by Katherina Reiss (1971), she introduced her model in compliance with her text type typology. According to her, assessment of translation quality should begin with establishing of what kind of text type the ST is. Because the foundation of her theory lays on the claim that “different text types have different functions”, therefore each text type needs to be evaluated differently. As it has been explained before, Reiss set in her approach on text types such

as informative, expressive, operative and audio-medial texts. According to her text type typology, assessing translation quality depends on the text type of the ST and so the TT. According to Reiss, "a translation is deemed 'good', if it is achieves optimum quality" (as cited in Lauscher, 2000). Keeping in the mind Reiss's functional oriented translation approaches, it can be considered that in her translation quality assessment model she stresses on the match purposes of the ST and the TT. According to Reiss, "evaluating a translation means reversing the translation process and reconstructing the translation strategy" (ibid). Reiss's a two-step-procedure to assess translation quality includes:

> 1. An analysis of the target text in order to evaluate the appropriateness of target language use, and
> 2. Comparison of source and target texts based on the analysis of both texts, so as to establish the degree of equivalence between them. (as cited in Lauscher, 2000, p. 152)

This model does not seem to be appropriate for all kinds of texts, such as texts that do not have the same purpose as TT. For example, some texts do not serve the same audience and same function, in providing an equivalent with the ST. For this reason, Bible translations cannot be evaluated using Reiss's translation quality assessment model. Moreover, although she states what is important in evaluating translation, she does not state how to establish the desired function that is prevailing in the translation.

Most of the discussions on quality assessment thus far have focused on quality in theoretical terms. In other words, many of the theoreticians or scholars so far argued that a translation should be assessed by whether it meets the linguistic equivalence or it meets social, cultural and functional (skopos of the text) norms of the target context. According to the models and theories proposed by all of the above mentioned scholars, quality mostly depends on the purpose and function of the translation. However, any of the models and theories about assessing translation quality suggested up till far neither appeal to empirical research on assessing processes nor products for different purposes, i.e. those of interest to the industry such as specifications, texts of standards etc. or is based on detailed error analysis.

Moreover, another problem of was their lack of clarity in results obtained. They failed to answer the question of "Can a translation meet users', target readers' or commissioners' needs and expectations?". In response, the Multidimensional Quality

Metrics (MQM) was developed under the EU-funded QTLaunchPad project which presents a flexible system for assessing translation quality and sets over a hundred error types.

In the following section, MQM which is the main quality assessment model of this study will be elucidated in connection with Skopos theory.

1.4. MULTIDIMENSIONAL QUALITY METRICS (MQM)

Multidimensional Quality Metrics (MQM) model was developed in the European-Union funded QTLaunchpad project for developing translation quality assessment metrics. According to MQM definition guide, “it provides a framework for describing and defining quality metrics which used to assess the quality of translated texts and to identify various translation errors in translated texts” (Lommel, Burchardt & Uszkoreit, 2015a). MQM is intended to provide various translation quality assessment metrics that can be used in all kinds of texts such as literary, technical and academic texts (including human or machine translation).

Since all texts have their own purposes, MQM adopts a “functionalist” approach in that it can be clearly seen whether the translation meets requirements and expectations of commissioner and/or target reader or not. With this function, it adopts “a functional approach that quality can be defined how well a text meets its communicative purpose” (ibid). It also ensures to avoid one-size problems in a translated text in assessing translation quality providing (as of 2017 September) almost 120 issue types, i.e. error types. Since a translation quality assessment has an objective aspect when it considers all kind of potential error categories, the model may establish a more objective approach by providing over a hundred issue types. The focus is not on the theory of translation quality assessment, but rather on the practice of translation quality evaluation in the professional sphere where translation quality is ever topical and contentious (O’Brien, 2012, p. 55).

It seems that MQM translation quality assessment model and skopos theory of translation have a common goal indeed, which is the view that translation quality assessment should seek to evaluate whether a translation meets expectations and

purposes of the TT and the commission or not. In order to meet this necessity, MQM is designed to be applied to both source and target texts. It defines errors in different issue types which are applicable for all kinds of source and translated texts. The issue types (possible translation mistakes) present a range of error category from linguistic aspects of a translation process to equivalence and even typography (punctuation, format, etc.) of a ST and TT.

The first two steps of this model are to define what is being evaluated and why it is evaluated (Lengyel, 2016, p. 132). The first one is related to the text type. Determining text type has a crucial role in both determining translation strategy and evaluating translation quality assessment, the correlation that postulates by Katharina Reiss between text type and translation method (1971, 1976) is based precisely on this assumption. The second step is related to the reason of evaluation of a text in terms of quality. The reason for evaluating may be found in the human behavior's itself. It can be conducted for many reasons including to define proper translations or just to criticize literary works. The present study attempts to assess translation quality of standards translated from English into Turkish after and before the year of 2016 to determine where there has been an improvement in the quality of standard translation as a result of the innovation that TSE went through which resulted in the introduction of a new standards developing and translation guide.

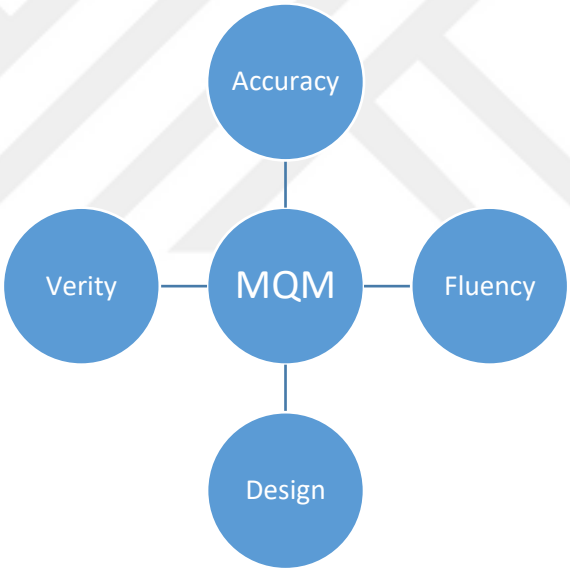
MQM model includes a weighing system for translation errors. According to the model, every error type is categorized and weighted according to the significance of translation error. MQM model defines weighting as "a numerical indication of the how important a particular issue type is in overall quality assessment (Lommel et al., 2015b). In this study, instances defined as a translation error were firstly categorized and weighted according to their severity levels, these levels have been postulated in MQM model as follows:

> Minor: Minor issues are issues that do not impact usability or understandability of the content. (i.e. if an extra space appears after a full stop, this may be considered an error, but does not render the text difficult to use or problematic.)
> Major: Major issues are issues that impact usability or understandability of the content but which do not render it unusable. (i.e. a misspelled word may require extra effort for the reader to understand the intended meaning, but do not make it impossible.)

> Critical: Critical issues are issues that render the content unfit for use. (i.e. a particularly bad grammatical error that changes the meaning of the text would be considered critical.) (ibid.)

As for error types, MQM provides over a hundred error types expanding core error categories. These categories represent the top level of MQM error types. Users can utilize all of the issue types by making a selection of contextually relevant issues for a given purpose. A customized translation quality assessment metric can be constructed by selecting relevant elements from the issue-type hierarchy, based on the categories, (Melby, Fields & Hously, 2014, p. 289) which can be selected in accordance with text type, the purpose of translation and/or purpose of quality assessment. These core error categories can be represented graphically as follows:

Figure 1. Core Error Categories of MQM (2015)



The issues in which the target text does not accurately reflect the source text are categorized under accuracy title. These are mistranslation errors, omission errors, addition errors, untranslation errors, terminology errors. Likewise, the issues related to the physical presentation of the text are categorized under Design title, such as Layout errors, Local Formatting errors, Graphics and Tables errors. The other title is Fluency which comprises issue types which disrupt the smoothness of the text such as Ambiguity errors, Inconsistency errors, Spelling errors, Style guide errors, Typography errors, Grammar errors, Locale Convention errors. Lastly, the issues related to text

appropriation for target audience are categorized under Verity title, such as Legal Requirements errors, Locale-specific Content errors. Accordingly, the instances determined will be illustrated under these categories in this study.

This part has dealt with the definition and description of Multidimensional Quality Metrics which is the main translation quality assessment model of this study. To fully comprehend MQM categories and error types, the following part provides a detailed description and exemplification of each error type which will be used in this study to analyze translation quality of standards.

1.4.1. Accuracy

Accuracy errors refer to instances where the TT does not accurately reflect the ST. To concept of translation studies, accuracy is typically referred to the concept of "adequacy". Adequacy and accuracy concepts have been studied and discussed by most of the scholars since the beginning of the history of translation theory. Accuracy has been understood as "adequacy", "correctness", "correspondence" or "fidelity". According to Reiss and Vermeer (2014), adequacy is "the relations between ST and TT as a consequence of observing a skopos during the translation process" (p. 139). In other words, if a translation can convey the ST items to the TT in terms of skopos and requirements of translation commission; then that translation is adequate. On the other hand, some scholars define adequacy a little far from the definition of Reiss and Vermeer. For instance, Toury (2012), defines adequacy as "adherence to source norms determines a translation's adequacy as compared to the source text" (p. 56). To Toury, what makes a translation adequate is fidelity to the source text. Thus, sometimes translators may decide to keep the norms of the ST to the TT while they sometimes may decide to adhere to the norms of the target culture. According to Toury's definition, "if it is towards the ST, then the TT will be adequate; if the target culture norms prevail, then the TT will be acceptable" (Munday, 2008, p. 112).

As for MQM context, "accuracy issues address the relationship of the target text to the source text and can be assessed only by considering this relationship. Unnecessary changes in intended meaning, addition and omission of content, and similar issues such

as mistranslation are considered in it" (Lommel et al., 2015b). The category of accuracy comprises several error types such as Mistranslation errors, Addition errors, Omission errors, Untranslation errors and Terminology errors, all of which will be addressed separately.

1.4.1.1. Mistranslation Errors

Mistranslation errors occur when "the target content does not accurately represent the source content" (Lommel et al., 2015b). If the TT reflects problems in conveying some items such as date/time, unit conversions, false friends, numbers, entity names, literal translation and over translation, then mistranslation occurs in that translation (ibid). MQM exemplifies a Mistranslation error as follows:

ST: Medicine should **not** be administered in doses greater than 200 mg
TT: Medicine should be administered in doses greater than 200 mg (ibid)

In this example, the negation in the ST has been omitted and the sentence was mistranslated in the TT.

1.4.1.2. Omission Errors

Omission errors occur when a content of the ST is missing in the TT. Omissions are performed due to several reasons, one is time and space restraints. In such cases, "translators mainly focus on grammatical forms which do not (significantly) affect meaning (Dimitriu, 2004, p. 166). However, omissions may also be adopted to avoid unnecessary culture shocks to follow text-type requirements and genre-related norms, and to translate for a certain readership based on its characteristics of age, education, gender and social class (ibid, pp. 165-166). In this present study, both of these cases are frequently seen while the latter is more common. As a nature of technical texts such as standard texts, they have a lot of culture specific items such as usages of units of measurement or other units. MQM exemplifies an Omission error as follows:

ST: Number of lives remaining: **$lifeNumber**

TT: Number of lives remaining
(Lommel et al., 2015b)

In this example above, the statement of "$lifeNumber" in the ST has been omitted in the TT.

1.4.1.3. Addition Errors

Addition errors refer to the items such as words, punctuation marks, numbers, graphics and tables, etc. that are inserted to the TT though those items were not present in the ST. According to MQM, this type of translation errors occur mostly in translations of standards when "a translation includes portions of another translation that were inadvertently pasted into the document" (Lommel et al., 2015b). In this case, it can be understood that irrelevant part of the text is pasted into the translation by mistake; however, in such cases, translators can deliberately make additions to their target texts with the aim of explaining a foreign item in the ST that can be senseless for the target reader. In such cases, additions may be conducted with in-text explication of foreign item or with explanatory footnotes or endnotes. However, such explications and additions may restrain the smooth flow of reading or bother the reader with extra details. MQM exemplifies an Addition error as follows:

ST: Put 15-ounce water.

TT: 15 ons **(bir kütle birimi)** su koyun. *[Put 15-ounce (a mass unit) water]*
(Lommel et al., 2015b)

In this example, the statement *"bir kütle birimi" [a mass unit]* has been added to the TT, though it did not present in the ST. It might be added with the aim of familiarizing the foreign item to the reader. However, this strategy adopted by translators is likely to undermine clear writing style of informative texts, although it may contribute to the meaning of literary texts.

1.4.1.4. Untranslation Errors

Untranslation errors refer to content "that should have been translated, but was left untranslated" (Lommel et al., 2015b). Such items are likely to mislead the reader, i.e. a possible practitioner of the standard is likely to fail in applying a construction or a test. An Untranslation error example is as follows:

ST: Press the button **twice**.
TT: Butona **twice** basın.

In this example the word "twice" in the ST has not been translated in the TT. Non-native English speaking reader is not likely to infer the message conveyed in the TT.

1.4.1.5. Terminology Errors

Terminology errors are related to the use of domain or specific terminology (Lommel et al., 2015b). They occur when a term in the ST is translated in the TT with a term other than the one expected for the domain, unless otherwise is specified. Analogously, in the present study, an error was defined as related to terminology, if the TT did not meet the requirement of expected and/or related stereotyped terminology. This error type should not be confused with Mistranslation error type:

> If the translation would be a valid translation of the source but simply does not use the particular mandated terminology. For example, if a text translates 'river bank' into Spanish as 'banco' (a financial institution) instead of orilla (a river bank), this would be a mistranslation because 'banco' would never be a valid term for the concept of a 'river bank'. However, if a term base specified that 'orilla' should be used and the translation uses 'ribera' instead, this would be a Terminology error because 'ribera' is a valid term for the concept, but not the specified one. (Lommel et al., 2015b)

MQM exemplifies a Terminology error as follows:

Term List: the product shall be referred as **"USB memory stick"**

TT: it is called as **"USB flash drive"**. (ibid)

In this example, though the commission states that the term of “USB memory stick” needs to be used in the translation, the term “USB flash drive” which is another statement for the term is used.

1.4.2. Fluency

Fluency refers to the quality of a text as a text on its own in terms of the text’s features being linguistically well-formed and understandable. According to Venuti (2008), a translated text, whether prose or poetry, literary or technical text, is judged acceptable by most publishers, reviewers and readers when it reads fluently, when the absence of any linguistic, stylistic or typographic peculiarities (p. 1). Here, as Venuti suggests, anything that intervenes the reader in a text may make that text non fluent. In MQM context, while the accuracy issues needs to be observed by comparing both a ST and a TT, fluency issues can be identified in the source or target texts on their own. MQM defines translation quality mainly on the basis of accuracy and fluency issues, it suggest the following definition of the translation quality:

> A quality translation demonstrates required **accuracy** and **fluency** for the **audience** and **purpose** and complies with all other negotiated specifications, taking into account end-user needs. (Melby et al., 2014, p. 279)

This definition addresses the importance of accuracy and fluency providing a close connection between MQM issue types of functionalism in translation studies. The term of “quality” in this definition must be understood in terms of specification, i.e. the commission which is the expectations of the target reader. In this aspect, MQM model defines the fluency as “issues related to the form or content of a text” that needs to be conducted in terms of expectations and needs of the target reader and target language (Burchard & Lommel, 2014, p. 10). Fluency category comprises Ambiguity errors, Inconsistency errors, Spelling errors, Style Guide errors, Typography errors, Grammar errors and Locale Convention errors.

1.4.2.1. Ambiguity Errors

Ambiguity occurs when a word, phrase or a sentence in a text has an ambiguous or equivocal meaning in itself. According to Newmark (1988), ambiguity is "a word or a syntactic structure, having apparently more than one meaning, in or in spite of its context" (p. 218). Newmark states that ambiguity may be deliberate or unintentional, and a deliberate ambiguity has, if possible, to be retained in the translation (p. 206) while unintentional one has to be conveyed into another language in its accurate and clear version. In technical texts, especially in technical standards, the rules and the vocabulary are specifically designed to reduce ambiguity because of the nature of technical text needs intelligibility. Geoffrey Kingscott (2002) stated the role of a technical translator's on ambiguity matter as follows:

> The technical translator, just like the technical writer, must write to communicate. It does not matter how beautifully expressed his prose is, it is all of no avail unless it communicates immediately and without ambiguity the message to the user of the documentation (p. 250).

A technical translator should pay attention not to use unclear and ambiguous utterances. MQM exemplifies an Ambiguity error as follows.

ST: **Nut of the screw and the axle** should be removed.

TT1: **Vidanın ve dingilin somunu** çıkarılmalıdır. *[nut of the screw and nut of the axle should be removed]*.

TT2: **Vidanın somunu ve dingil** çıkarılmalıdır. *[the axle and nut of the screw should be removed]*. (Lommel et al., 2015b).

Two translations of the ST are possible in the TT. The structure of the sentence determines the meaning of translation; therefore, ambiguity is one of the most common and important issues which should be eliminated in technical texts.

1.4.2.2. Inconsistency Errors

Errors related to inconsistency occur in texts that are marked with inconsistency in the translation of lexical items. Baker (2006) states that individual choices made by translators can give an impression of inconsistency. Inconsistency within a text

inevitably has an impact on the way a readers' assess the structural coherence elaborated in the text (p. 146). It can be argued that technical texts need to be consistent because they need to be written and translated into a clear and understandable language. If the TT reflected some problems in being consistent in some items such as abbreviations, discourse, terminology and images or design, then they were defined as Inconsistency errors in the present analysis. MQM exemplifies an Inconsistency error as follows:

"If a TT uses both "app." and "approx." for approximately, then an inconsistent translation occurs." (Lommel et al., 2015b).

In this example, MQM highlights that consistency is needed in a translation even if in the usage of abbreviations.

1.4.2.3. Spelling Errors

Spelling error refers to errors related to a wrong orthography and spelling of a word. For detecting error type, both a comparative analysis between the ST and the TT; and a descriptive analysis of the TT were conducted. Spelling errors comprise capitalization and diacritics errors. MQM exemplifies a Spelling error as follows:

"The Hungarian word bőven (using o with a double acute ˝) is spelled as bõven (using a tilde ˜), which is not found in Hungarian."

In this example, it is illustrated the importance of the usage of accents which is classified as a spelling error. Since the incorrect usage of an accent is likely to shift the meaning of a word, incorrect usage of the accent (˝) rendered the content as nonsense in the example above.

1.4.2.4. Style Guide Errors

Style Guide errors occur in translations when there are violations of the style defined in a normative specification given by a company, institution or organization etc. to be used in the translation process. In the present study, there are two main guidelines for

developing and translating standards. The first is Internal Regulations Guide, which provides rules for the structure and drafting of CEN/CENELEC Publications, i.e. the standards studied in the present study, and the second is the Turkish Standards Preparation Guide, which provides rules for the structure and translation of standards to be developed or adopted by translators. Instances that did not comply with the rules of the guides were classified under the Style Guide error type in the present study. MQM exemplifies a Style Guide error as follows:

A translation guide of a company: Translation shall not present passive sentences.

TT: Windows can be opened after an hour.

In this example, though company style states that passive sentences shall not be used, the TT presents passive sentences.

1.4.2.5. Typography Errors

Typography errors refer to peculiarities observed in the mechanical presentation of a text such as incorrect usage of punctuations, missing blanks between lines and/or words, or unpaired quote marks. According to MQM model, this category should be used for any typographical errors other than spelling (Lommel et al., 2015b). For detecting the error type, both a comparative analysis between the ST and the TT; and a descriptive analysis of the TT can be conducted. MQM exemplifies a Typography error as follows:

TT: King Ludwig of Bavaria (1845–1896 was deposed on account of his supposed madness. (Lommel et al., 2015b)

In this example, the closing parenthesis around the dates has been omitted.

1.4.2.6. Grammar Errors

Errors related to grammar refer to “the peculiarities in respect to grammar or syntax of the text, other than spelling and orthography” (Lommel et al., 2015b). It can be also defined as “the content uses the wrong grammatical register, such as using informal

pronouns or verb forms when their formal counterparts are required" (ibid). Chomsky (1965) defines grammar as "a system of rules that in some explicit and well-defined way assigns structural descriptions to the sentences" (p. 8). Every language has its own system as Chomsky defines. Translators should pay attention to the rules of those systems in the process of translation. MQM illustrates a Grammar error as follows:

The ST: It **shall** be delivered within 3 days.

TT: 3 gün içinde teslim edil**ebilir**. *[It **can** be delivered within 3 days]*

In this example, the verb "deliver" in the ST has been used with the modal "shall" which conveys necessity. However, it has been translated as *"teslim edilebilir" [can be delivered]* in the TT which conveys possibility.

1.4.2.7. Locale Convention Errors

Locale Convention errors refer to errors that do not adhere to locale-specific mechanical customs and violates requirements for the presentation of content in the target locale (Lommel et al., 2015b). MQM illustrates a Locale Convention error as follows:

"An American source text provides the date **02.09.**09 (February 9, 2009) but the Turkish reader renders it as **September 2,** 2009." (Lommel et al., 2015b)

According to this example, considering that the American date format may vary by usage, a translator should be conscious of this fact. In the American date format, the months can be written before days compared to the European date format.

1.4.3. Verity

Verity refers to text appropriation for the target audience in MQM context. It exists when a target text fails to meet "the suitability of content for the target locale and audience" (Lommel et al., 2015b). In other words, verity errors involve elements of the translation which pertain to the relevancy of the translation to the target audience. Verity category has common essence with Skopos theory indeed. Verity issue searches

for the conviction “whether it (translation) makes sense to produce a translation, which function it should serve, how this function can best be conveyed to target audience” (Reiss & Vermeer, 2013, p. 74). Reiss and Vermeer (1989, 2013) emphasizes that every translational process is directed at an intended audience, so the translator/interpreter not need to be consciously aware of the recipients (p. 76). Similarly, verity category stresses on target reader’s needs and expectations. The category of verity comprises two error types: the first is Legal Requirements errors and the second is Locale-specific Content errors, each of them will be addressed separately.

1.4.3.1. Legal Requirements Errors

Legal requirements errors refer to instance where a text does not meet legal requirements as set forth in the specification, i.e. infringement of rules of publishing or list of prohibited articles. MQM illustrates a Legal Requirements error as follows:

> “A computer advertisement written in the U.S. directly compares a computer’s features with those of a competitor to conclude that the advertiser’s computer is better than the competitor’s. This sort of advertisement is perfectly acceptable in U.S. whereas it is illegal under German law”. (Lommel et al., 2015b)

1.4.3.2. Locale-Specific Content Errors

Errors related to Locale-specific Content refer to instances that occur where “a content specific to the source locale does not apply to the intended target locale, audience, or purpose” (Lommel et al., 2015b). MQM illustrates a Locale-specific Content error as follows:

> An automobile service manual for a British automobile assumes a right-hand drive automobile and includes descriptions for that drive system. When the manual is used in the United States, these references are no longer appropriate to the automobile and must be modified to reflect the use of left-hand drive systems in the U.S. These issues can be categorized as Locale-specific content errors. (Lommel et al., 2015b)

1.4.4. Design

Design related errors refer to “issues related to the physical presentation of the text”, here the TT (Lommel et al., 2015b). According to Skopos theory, in order to achieve equivalence between the ST and the TT, needs of a target reader, as well as necessities and rules of a text type are in the priority of the translators (Reiss & Vermeer, 2013, pp. 143-145) because, functions are always linked to text types, conventions and specific circumstances (ibid). As it is postulated by Skopos theory, not only lexical items, but also necessities of a text type, such as design, are included in the translation process. These requirements are important factors determining translation quality of a text. Within MQM framework, design error type contains under its branches text features to be assessed such as punctuation, capitalization, color, font choice, footnotes/endnotes, headers/footers, and margins. The category of design comprises several error types such as Layout errors, Local-formatting errors and Graphics and Tables errors, all of which will be addressed separately.

1.4.4.1. Layout Errors

Layout refers to the way a text arranged in the context of MQM model. Items of the TT such as color, global font choice, footnotes/endnotes, headers/footers, margins, page breaks etc., which were not translated in accordance with the layout design of the ST were defined under Layout error type in the present study. MQM defines a Layout error as follows:

“If headers or footers should appear on every page in a text but they have been omitted in translation, then that error can be categorized under Layout errors” (Lommel et al., 2015b). In this example, the importance of a Layout error highlighted with an example of absence of headers or footers.

1.4.4.2. Local-formatting Errors

Local-formatting errors occur when a text has peculiarities related to the format. In the present study, instances related to the format in the TT that were not translated in

accordance with norms of text type, i.e. informative text type here, were defined under Local-formatting error type. The errors were categorized under this error category when they failed to meet expectations of the target reader and the text type criteria related to format such as text alignment, paragraph indentation, bold/italic, font, kerning, leading. MQM illustrates a Local-formatting error as follows:

"If titles should have been italicized in the ST, but the italics did not present in the TT" (Lommel et al., 2015b), this kind of error is classified as a Local-formatting error.

1.4.4.3. Graphics and Tables Errors

Graphics and Tables errors refer to translation errors related to the formatting of graphics and tables in the TT. If graphics and tables of the ST were not conveyed completely and accurately to the TT in terms of their position and/or captions, then such instances were defined as an error related to graphics and tables. MQM illustrates a Graphics and Tables error as follows:

"If captions of a graphic or table cannot be read in the TT, then Graphics and Tables error occurs" (Lommel et al., 2015b). In this example, MQM stresses on the readability of graphics and tables in a translation.

To sum up, this chapter has attempted to provide a theoretical framework for translation quality assessment of standards texts. Accordingly, firstly, *Skopostheorie* of Vermeer (1978) has been presented. Secondly, a brief history and definition of translation quality assessment has been provided. Thirdly, MQM translation quality assessment model has been introduced. Lastly, error types of the model have been categorized and exemplified within the scope of the present study. Core error categories of MQM model have been selected to assess translation quality of standards in the present study. The next chapter will provide information about standards and their peculiarities.

CHAPTER 2
A GENERAL REVIEW OF STANDARDS

This chapter dwells on the definition of standards and seeks to briefly clarify the history of standardization and standardization organizations. In this chapter, firstly, the definition of standard will be explained briefly by touching upon purposes and benefits of standards. Secondly, a general overview of the history of standardization will be discovered in brief. Thirdly, features of Turkish standards will be addressed by touching upon their linguistic, stylistic and contextual features which play an important role in the translation quality assessment process. Finally, the field of construction will be explained briefly, which the translation quality analysis of this study is based on.

2.1. WHAT IS A STANDARD?

Standards are all around the life even if people consciously are not aware of them. In the universe there is a perfect relationship between living beings in some kind of standard. Even the night and the day follow in quick succession each other following the same pattern. We are surrounded by standards in our daily lives from pencils to water that are essential parts of human life. Standardization has always been one of the necessities of human being as a need for achieving quality and consensus. Especially, in the rapidly globalized world, the need for mass production has necessitated for standards. In terms of language, standards may be expressed as material or service that recognizable by both sender and receiver when they talk or think about. In other words, what is intended by a sender and the same inferred by a receiver has a standard. Main European standard bodies define a standard as “a document, established by consensus and approved by a recognized body, that provides, for common and repeated use, rules, guidelines or characteristics for activities or their results, aimed at the achievement of the optimum degree of order in a given context” (ISO/IEC Guide 2, 2004, definition 3.2). In other words, consensus is the main criterion of standards, since standards are the result of uniformity and they are acknowledged by a recognized body on condition of reaching a consensus.

In the official ISO/IEC Guide (2004) standardization is defined as “the process of formulating, issuing and implementing standards” (definition 1.1). Thus, standardization is the activity of establishing and applying standards in various fields. Standardization plays a critical role not only in establishing markets for products and services but also in facilitating and regulating trade and industry. Certification process of products and services is a difficult but time saving task that can offer great benefits to industries, producers and consumers. Products or services can reach much wider markets and countries at a cheaper and easier cost by means of having one common standard that assures products or services to access to all countries. Having a standard product and service may gain an unquestioned acceptance by consumers, users or suppliers since they have recognition to classify those products and services. Albeit standardization sets a ground to facilitate activities in industry and commerce, standards do not compel how the way of products or services designed and produced. Standards have voluntary implementation status, this means that there is no legal obligation to buy and apply. However, laws and regulations may be compulsory. Standards may gain obligatory status only through their regulation on product safety requirements. Russell (2005) argues over the voluntary status of standards stating that “standards can emerge as the consequence of consensus, the imposition of authority, or a combination of both” (p. 247). This dualism presents multifaceted nature of standards; it was seen in history, Ottoman Empire had put some regulations by royal command on ceiling price to arrange economical balance of the public and the quality of the goods, on the other hand it can be seen in today’s standardization organizations as ISO provides quality standards services that the businesses may purchase voluntarily.

Apart from the text of standards defined above, there are some other binding documents which operate as standards. As types of standards, International Standards (IS) and European Standards (EN) are the main types. Moreover, harmonization documents (HD), technical reports (TR), publicly available specifications (PAS) and technical specifications (TS) are documents which contain informative materials, advices, rules, and recommendations relating to standardization (TSE, 2016, pp. 11-12). In this study, not only standards but also this kind of regulation texts will be analyzed in the light of the Skopos theory using MQM translation quality assessment model.

2.2. BRIEF HISTORY OF STANDARDIZATION

Standardization is as old as the interaction between human beings. People do need a shared way of communication through the human history. Even the language and ways of communication between people are the first standardization examples as an unconscious activity of man. Other examples of precursor standardization are the stone samples which date back to around six thousand years ago, in similar form and shape that have been found at excavation sites around Europe, Africa and Asia (United Nations Industrial Development Organization [UNIDO], 2006, p. 1). Standards allow people to live in a collective harmony within societies. These findings may show that standards were used in daily activities of ancient human beings. As another example of first standardization activities, between the 7th century B.C and the 17th century A.D., it has been founded that standards for units of measurement of time, weight, length and money were used by communities in various parts of the world (UNIDO, 2006, pp. 1-2).

As a conscious activity, the first standardized law of the world was put into force named as *the Law of Municipality of Bursa* in the Ottoman Empire in 1502 by Sultan II. Bayezid (tse.org.tr). With this law, some products to be in the market of the country such as notably bread, animal products, fresh-cuts, all products related to industry, textile, forest and leather were bound to a standard and their prices were fixed by the authorities.

As an engineering activity of standardization, Eli Whitney who invented the cotton gin in 1793 pioneered to standardization for mass production (as cited in UNIDO, 2006, p 2). From this date on, a range of inventions has been emerged under the Industrial Revolution. Inventions have been brought standardization with themselves. Standardized products can turn out at relatively low cost and at very high volume in favor of mass production. Therefore, as of 18th century, by courtesy of globalization the increased demand for mass production led to advanced modes of standardization. One striking example of first systematic attempts at standardization can be seen in the metric system. With the French Revolution, a number of inventions and standards were focused mainly on weights and measures (Russell, 2005, p. 249). Since there were a lot

of scientists and inventors, their discoveries were different from each other and needed to be unified for mass production. As Alder (2002) states, the intensification of collaboration between scientists in different countries was hindered by their different standards of measurement (p. 89). For this reason, a unified system of weights and measures was desired. And consequently, the metric system was developed during the French Revolution by the first French Republic in 1977 (Alder, 2002, p. 92).

There were also civil benefits of the early standardization. Quigley and Robertson (2015) note a striking example of a civil benefit of standardization as follows;

> In 1904, a fire broke out in the basement of the John E. Hurst & Company Building in Baltimore. After taking hold of the entire structure, it leaped from building to building until it engulfed an 80-block area of the city. To help combat the flames, reinforcements from New York, Philadelphia and Washington, DC immediately responded but their fire hoses could not connect to the fire hydrants in Baltimore because they did not fit the hydrants in Baltimore. They watched helplessly the flames spread, the fire destroyed approximately 2,500 buildings and burned for more than 30 hours [...]. (pp. 189-190)

This incident may help us to fathom out that a set of national standards has to be developed in a country to ensure safety in different areas. As a natural result of this necessity, countries have begun to create institutions for standards development and enforcement.

2.3. NATIONAL, REGIONAL AND INTERNATIONAL STANDARDS ORGANIZATIONS

There are a large number of standards development organizations in the world. They carry out standardization activity and operate at various levels as national, regional and international levels across almost all product areas. With the advent of mass production, their creation can be deemed as a shortcut to achieve uniformity.

The first step of the institutionalization of standards development was in-company standardization. According to Ping (2011), “modern standardization was directly related to companies from the beginning” (p. 5). With the momentum of Industrial Revolution and mass production, companies began to fail on achieving uniformity. Ping states that, in 1895, Harry J. Skelton, an iron and steel dealer of England, complained of difficulty

in purchasing steel girders in a letter to *The Times […],* and proposed to standardize the cross section of rolled steel girders (ibid.). This incident should have been attributed to the emergence of standardization organizations. Because, after several years from the letter of Skelton, British Standards Institute (BSI) which is the world's first national body, was founded in 1901 partly credited by Englishmen to Skelton (ibid.).

The second step of the institutionalization of standards development, the emergence of national and international standardization, was originated from the expansion of international trade. It led to creation of many regional, national and international level SDOs at the end of the nineteenth century.

Before delving into the analysis of standards, there seems to be the need to present some major and leading standards development organizations in the following sub-sections.

2.3.1. International Electrotechnical Commission (IEC)

Founded in 1906, International Electrotechnical Commission (IEC) was established by 15 countries to undertake standardization operate at international level in the electrotechnical field. It develops and publishes international standards for electric and electronic products, jointly known as electrotechnology. The IEC was probably the first international standard organization; it was instrumental in the creation of ISO (Parker, 2009, p. 540). As of the beginning of the 20th century, standards development organizations have been affected each other. According to Willy Kuert, who is now the sole surviving delegate of the founding meeting of the ISO, "the IEC was incorporated into the ISO in 1947 but they divorced in 1976" (*Friendship among equals*, 1997). However, in 1987, "the ISO and the IEC combined their existing information and standards groups under the newly established Joint Technical Committee 1 (JTC1)" (Schneiderman, 2015, pp. 256-257). According to Choi and Puskar (2014), JTC1 is an agreement in which IEC is responsible for international standardization in the electrical and electronic fields, while ISO is responsible for other remaining areas (Choi & Puskar, 2014, p. 15). The IEC also cooperates with other leading international, regional and national partners, one of them is Turkey.

2.3.2. International Organization for Standards (ISO)

Founded in 1947, International Organization for Standards (ISO) was created through discussions held at a conference in London in 1946 by delegates from 25 countries with the aim of "promoting international coordination and uniformity of industrial standards" (iso.org). With the union of International Federation of the National Standardizing Associations and United Nations Standards Coordinating Committee the ISO was created. The new organization "was called as ISO which was derived from Greek word isos meaning equal" (iso.org).

ISO is the world's larger standards developer organization with its 163 member national standard bodies. Each country has only one national standardization organization according to the membership rules of the international standardization organizations (Ping, 2011, p. 13), thus only one national standards body is allowed to represent its country.

2.3.3. The European Committee for Standardization (CEN)

Founded in 1961, the European Committee for Standardization (CEN) "is an association that brings together the National Standardization Bodies of 33 European countries" (cen.eu). CEN is a regional standardization organization emerged in Europe with the aim of developing the European Community. According to CEN's founding agreement, "CEN provides a platform for the development of European Standards and other technical documents in relation to various kinds of products, materials, services and processes" (cen.eu). It has a wide range of fields and sectors for standardization activities.

CEN has undergone a strong development with the improving formation of the European Union. It assumed relatively low profiles until the early 1980s, when the European Commission became more proactive in establishing a Single European Market (David & Shurmer, 1996, p. 793). The body has a counterpart European standardization organization that also recognized by the EU. CEN cooperates with this organization named CENELEC stands for the European Committee for Electrotechnical

Standardization, and they both also cooperate with ISO and IEC. The close collaboration between CEN and CENELEC was consolidated at the start of 2010 by the creation of a common CEN-CENELEC Management Centre (CCMC) in Brussels (cencenelec.eu).

2.3.4. The European Committee for Electrotechnical Standardization (CENELEC)

Founded in 1973, the European Committee for Electrotechnical Standardization (CENELEC) is responsible for standardization in the electrotechnical engineering field. “CENELEC prepares voluntary standards, which help facilitate trade between countries, create new markets, cut compliance costs and support the development of a Single European Market” (cenelec.eu).

Schneiderman (2015) states that “the members of CEN and CENELEC are national standards bodies in all of the EU members also Iceland, Norway, Switzerland, and Turkey” (p. 259).

Some of the other prominent national, regional and international standard developing bodies are listed in the following table.

Table 2. Main National, Regional and International Standard Developing Organizations Across the World

Organization	Foundation Year	Country	Status
British Standards Institution (BSI)	1901	U.K	National
German Institute for Standardization (DIN)	1917	Germany	National
American National Standards Institute (ANSI)	1918	U.S	National
French Association for Standardization (AFNOR)	1926	France	National
Japanese Industrial Standards Committee (JISC)	1929	Japan	National
Turkish Standards Institution (TSE)	1960	Turkey	National
European Committee for Standardization (CEN)	1961	Europe	Regional
European Committee for Electrotechnical Standardization (CENELEC)	1973	Europe	Regional
European Telecommunications Standards Institute (ETSI)	1988	Europe	Regional
International Electrotechnical Commission (IEC)	1906	Worldwide	International
International Organization for Standards (ISO)	1947	Worldwide	International

2.4. STANDARDIZATION IN TURKEY

After the Ottoman Empire's regulations on standards that were implemented from the 1500s until the 1800s, the first activities on standardization in Turkey commenced in 1930. In this period, various laws had contained some provisions and regulations about standards. In the earlier stages, there was a sole attention to agricultural and industrial areas and only one department was set up to produce standards in these fields. Afterwards, it became explicit that it was necessary to establish an institution in order to develop standards in various areas. National standardization body of Turkey, TSE, summarizes the first step for this necessity as "in 1951, the Ministry of Economy and Commerce, jointly with the Union of Turkish Chambers of Commerce, Chambers of Industry and Commodity Exchanges, agreed on necessity of standardization to support the speedy development of local industry as well as the worldwide trade movement" (tse.org).

2.4.1. Turkish Standards Institution (TSE)

Founded in 1960, Turkish Standards Institution (TSE) is the sole national standardization institution of Turkey. The task of preparing all kinds of substances, goods, works and service standards in Turkey is given to TSE by the Establishment Law No. 132. Only the standards prepared by TSE may take the name of Turkish Standard. On the process of developing these standards, the ground is based on previously published standards such as international standards (ISO, IEC, etc.) and regional standards (ASTM, DIN, BSI, JIS, etc.). Scientific examination and preparation of the standards are carried out by the Specialized Committees of the TSE. TSE is an active member of the world's prominent standardization community, with its full membership of ISO, IEC, Standards and Metrology Institute for the Islamic Countries (SMIIC), CEN and CENELEC (tse.org).

2.5. STANDARDIZATION PROCESS OF TURKISH STANDARDS

Turkey plays a significant role in the European market in many areas, especially in the trade. It has a functioning quality system compared to many countries in the areas of standards. Turkey has a large and expeditious growing standards stock. According to 2015-2016 progress report of Turkish Standards Institution (TSE), the standards catalogue of the Turkish Standards Institution (TSE) lists 36581 standards, which is “slightly fewer than in Romania but more than in most other countries, including the United Kingdom and Korea” (Guasch, Racine, Sanchez, Diop, 2007, p. 252). As long as the communities are developing with technological improvements, need for standards and standardization activities will increasingly continue. Therefore, Turkey maintains to develop standards to keep with age’s requirements. At this point, there are a lot of work and responsibilities for standardization organizations and institutions.

Standardization institutions generally implement a work program varying from organization to organization and have technical committees consist of representatives from government, academia, prominent sectors, consumer associations, research institutions and translators. Typically, any of the committees are responsible for developing standards in their own specific fields.

Organs of the main standardization organization of Turkey, TSE, consist of the General Assembly, the Technical Board, the Board of Directors, the Supervisory Board and the Specialized Boards, and the General Secretariat and Service Units. Specialized Boards are bodies of TSE which conduct scientific research and develop standards. They consist of the "Preparatory Groups" selected by the Chairman and the Board of Directors and the "Special Permanent Committees" and "Technical Committees" established in accordance with the requirements. As it is stated before, members of these committees are selected among academicians and members of the public and private sector who are experts in their fields. Currently, there are 18 Specialized Board and 46 Technical Committee within the body of TSE.

In recent years, standard developing and implementation activities have been improved and accelerated. In 2004, in addition to technical committees, mirror committees have been established with the aim of ensuring active participants of all parties in developing

national, regional and international standards, informing all interested parties about standard preparation activities and determining the official country opinion.

Turkish standards are prepared with the help and cooperation of all interested parties, Technical Committees under Specialized Committees, and Mirror Committees in line with the principles of international standard preparation. In this respect, standards are products of a common work. According to TSE's work program (2016), Turkish standards are prepared through the following processes:

> 1. The subjects shall be determined and attached to the work program upon opinion or on demand of relevant ministries, public and private sector organizations, scientific organizations, producers, consumers or professional associations and organizations.
> 2. According to the standard's field and nature, a technical committee shall be established and a "subject reporter" shall be appointed to translate ISO, IEC, EN standards.
> 3. A rough draft shall be prepared by the reporter or Technical Committee.
> 4. The draft shall be discussed in the relevant Specialized Board and a "draft standard" shall be created in compliance with content, terms, and standard format.
> 5. Draft standard, shall be sent to related departments of the relevant Institutions and Organizations and the universities, manufacturers, the representatives of the users, and Mirror Committees to offer for consideration. This process has name of "first consideration". A period of two months is allowed for first consideration.
> 6. In line with the views and proposals presented from this first consideration process, the draft shall be improved and transferred to the Technical Committee of the related Specialized Board. If it is deemed that the draft is not developed enough, a second consideration process can be foreseen.
> 7. After consideration processes, the draft shall be revised in compliance with feedbacks and proposal. This process has name of "first maturation".
> 8. The final draft shall be sent to the Technical Committee and Specialized Board, after approval the draft become a Turkish Standard.
> 9. After being accepted as "Turkish Standard", it is published in TSE's web site and offered for sale.
> 10. After publication of standards, in case of detection of errors or deficiencies, the related standards shall be amended or revised. (tse.org., my translation)

The Specialized Boards operating in TSE carry standards developing and harmonizing activities in various fields such as environment, electricity, electronics, service, construction, chemistry, mining, machinery, food, agriculture and livestock, metallurgy, national defense, engineering service, forest, health, textile, transportation and carriage and recently halal food (TSE, 2016, pp. 11-18). Having their own technical committees, standards belong to these Specialized Boards are developed and harmonized in form of

Idiosyncratic Turkish Standards, Adopted Turkish Standards and *Translation Turkish Standards* (ibid).

2.5.1. Idiosyncratic Turkish Standards

The Idiosyncratic Turkish Standards are the standards prepared by Technical Committees which are formed only for the relevant subject by experts of the Specialized Boards (ibid.).

2.5.2. Adopted Turkish Standards

Adopted Turkish Standards are the standards published by using texts of international standards, European standards, and other national standards which are not still translated into Turkish. These kinds of standards are published by adding a Turkish national title page and national foreword to the original text.

If a national standard adopts international or European standards, the relationship with that standard shall be given on title page (ISO/IEC Directives, part 2, 2011, pp. 82-88). If the original standard is an international standard the title shall contain the name of the standardization organization (ISO/IEC etc.), if it is a European standards, title shall contain “EU”.

2.5.3. Translation Turkish Standards

Translation Turkish Standards are standards prepared by means of translations of standard texts of international and European standards organizations which published in English, French or German (TSE, 2016, p. 13).

Documents gain “Turkish standards” statute by translating original text and adding national title page, national foreword and national annex.

2.6. GENERAL FEATURES OF STANDARDS AND LINGUISTIC FEATURES OF THEIR TEXT TYPE

Standards are defined as “a document, established by consensus and approved by a recognized body, that provides for common and repeated use, rules, guidelines or characteristics for activities or their results, aimed at the achievement of the optimum degree of order in a given context” (ISO/IEC Guide 2, 2004, definition 3.2).

All the texts of standards have their own standards no matter what their kinds are. First of all, being technical texts rather than literary, standards have the characteristics of technical writings. Markel (2003) states that “technical communication is not meant to express a writer’s creativity or to entertain readers; it is intended to help readers learn or do something” (p. 8). In this sense, language features of standards are shaped by their functions. Standards aim to ensure compatibility, quality, optimization and information to its reader by providing normative and informative rules (Hatto, 2010, pp. 5-6). Hatto explains linguistic items in standards as follows:

> Normative elements are those parts of the standard that shall be complied with in order to demonstrate compliance with the standard. Normative elements are indicated by the use of the word 'shall'. Informative elements in standards provide clarification or additional information and are normally contained in Notes and Appendices. Informative elements may not contain requirements, i.e. the word 'shall'. (ibid)

Having informative nature and elucidative structure, standards can be categorized as belonging to informative text type postulated by Reiss. Text type categories of Reiss developed a translation-oriented text typology with the aim of deriving strictly objective criteria for assessing the quality of translations (Schaffner, 2008, p. 116). In other words, knowledge of text type of the ST may help the translator to determine his/her translation strategies as well as to assess the translation quality. According to Bryne (2006), the actual language used in a technical text, is probably the most critical factor in determining its quality and effectiveness (p. 83). There are common characteristics of informative texts such as being explanatory, simple and imperative. Parallel to the characteristics of informative and technical texts, language features of standards are defined in Internal Regulations of IS0-IEC directives (2015) which set the rules for standards development process as follows:

"The wording of the standard shall be established with the greatest care; while being as concise as possible, it shall indicate the meaning without ambiguity." (p. 21)

It can be inferred from the direction above that standards should be written in a plain language in order to establish an easy understanding of the texts. In that, standards are written to be understood and applied in line with the instructions they convey. When we take into consideration MQM model, we can say that in accordance with their text type, standards needs to be translated without any unnecessary additions, omissions, or implications which will make the utterance complex.

Similarly, TSE Standards Development Guide (2016) describes the language features that need to be standardized in texts of standards as follows:

> A standard language shall be used in standards texts. The language shall be clear, explicit and understandable. A neutral and an objective style of language shall be chosen. The texts shall be written in accordance with the grammar and spelling rules of the language in which they are written or translated. Consistency and uniformity shall be provided in structural and stylistics features and terminology in standards texts. (p. 8, my translation)

TSE clearly sets the characteristics of language in standards as it can be seen above. A common language style is established by all of the national, regional and international standards development bodies. CEN/CENELEC IR 3 also addresses a crucial point which has to be taken into consideration in developing and translating processes of standards as follows:

> In language of standards, necessity and recommendation must be strictly separated. Do not use "must" as an alternative for "shall" in order to avoid any confusion between requirements and obligations. Do not use "may not" instead of "shall not" to express a prohibition. Do not use "can" instead of "may" in this context, because "May" signifies permission expressed by the document, whereas "can" refers to the ability of a user of the document or to a possibility open to him/her. (IR 3, 2015, pp. 75-76)

To establish a common language in standards, rules and necessities are defined for every title and content. In translation process of standards, the equivalence between the ST and the TT should be provided in terms of common rules and needs of target audience. Concordantly, there are some rules for reproduction of a standard in another country's standard form. This translation process is named as "publication of an International or European standard as national standards" which is actually "translating"

them. In IR 3, this process is depicted as “since International and European Standards are published as identical in technical content and presentation, precise uniform rules shall be observed for their incorporation into each national collection of standards” (p. 87). This incorporation shall apply special rules as follows:

> Each National Member shall have a national designation for its national implementation of the European Standard (“EN XXX” becomes “National Designation EN XXX”).
> In the case of translation, a national title page is added. The national designation shall appear on the national title page. The national title page or the national foreword shall also indicate at least the year of the Date of Availability of the European Standard. A national foreword and national annexes are permitted. In the national translation of the EN title page all the information given in the three languages shall be retained unaltered in presentation and content. (ibid)

In short, the following three features must be supplied in the translation of a European Standard; (1) designation “European Standard”, (2) title of the Standard, and (3) name of the issuing organization. IR 3 also argues over the translation of a European Standard as follows:

> Translation process should neither extend not limit the content of the source text, i. e. the main meaning of the content shall remain unaltered by translation and shall be adopted in its entirety, including the list of contents, European foreword, introduction, footnotes, tables, figures and annexes. Moreover, a national identifier of the organization adopting the European Standard, [like TSE] shall be made visible on each page of the national implementation. (IR 3, 2015, pp. 75-78)

The general structure of a standard, whatever it is, (i.e. regional (EN) or international (IEC/ISO)), consist of some main titles and elements. Documents are so variable that no universally acceptable rules may be established for their structural contents. However, according to ISO/IEC directives which determine the general rules of regional and international standards, an individual document shall be prepared and translated in compliance with the following elements:

Title page
Table of contents
Foreword
Introduction
Title
Scope
Normative references
Terms and definitions
Normative annex
Informative annex
Bibliography

(IR 3, 2015, p. 18)

(Bold type: mandatory elements)

Structures of the documents consist of two main parts which are “body” and “additional elements”. The body comprises general elements relating to its subject and definitions, and main elements conveying provisions (ISO/IEC guide 2, 2004). On the other hand, for the translation of an official European and international standard, there are mandatory rules that shall be added to the document as follows:

a. National title page
b. National foreword
c. National annex

(TSE, 2016, p. 13)

The first part of the documents which have gained the status of Turkish standard by translating from a foreign language will be as mentioned above. The final structure of the translated Turkish standards will be as follows:

National title page
National foreword
IEC/ISO/EN title page
Table of contents
Scope
Normative references
Terms and definitions
IEC/ISO/EN text
IEC/ISO/EN annex
Bibliography (IR3, 87-88)

The following table shows the parts of standards which are to be translated and their Turkish equivalents which should be in a standard linguistic form.

Table 3. Translations of Frequently Used Expressions in Standards

English	**Turkish**
Title page	kapak sayfası
Contents	İçindekiler
Foreword	Önsöz
Introduction	Giriş
Scope	Kapsam
Conformance	Uygunluk
Normative references	Bağlayıcı atıflar
Terms and definitions	Terimler ve tanımlar
Symbols and abbreviations	Simgeler ve kısaltmalar
Requirements	Gereklilikler
Sampling	Numune alma
Test methods	Deney yöntemleri
Classification, designation and coding	Sınıflandırma, kısa gösteriliş ve kodlama
Marking, labelling and packaging	İşaretleme, etiketleme ve ambalajlama
Annex (normative)	Ek (bağlayıcı)
Annex (informative)	Ek (bilgi için)
A-deviations	A-sapmaları
Bibliography	Kaynaklar
Index	Dizin
Annex	Ek
Annex ZA	Ek ZA
Annex NA	Ek NA

2.7. THE SIGNIFICANCE OF THE FIELD OF CONSTRUCTION AND THE INTRODUCTION OF THE STANDARD DEVELOPING AND TRANSLATION GUIDE (2016)

The twenty randomly chosen standards were issued by Construction Specialized Board of TSE. The standards were prepared and translated by four Technical Committees affiliated to the Construction Specialized Board, which are *TK10 Building Materials Technical Committee, TK11 Isolation, Coating and Auxiliary Building Materials Technical Committee, TK12 Structural Safety and Acoustics Technical Committee* and *TK13 Construction Safety Technical Committee*. These technical committees are responsible for both developing idiosyncratic standards and translating standards. The standards examined in the study belong to the field of construction, which has often undertaken a leverage role for the countries' economies with its economic value and employment opportunity, and which has a separate importance for Turkey. Construction does not only signify the construction of the city but also signifies a production that directly affects social structure maintenance, repair, operation and security. The quality of translations of standards published by Construction Specialized Board of TSE is likely to significantly affect Turkey's economy and standard of living.

Translation activities in TSE have showed an increase with TSE gained the membership of CEN in the year of 2012. Previously being only an ISO member, TSE did not have to accept ISO (international) standards as national standards. In other words, the most important standards in preferred areas were chosen and adopted via translation as national standards. However, the membership of CEN has forced TSE to comply with CEN and ISO standards because the standards published by CEN apply to all member states. In other words, when these standards were published, no matter if they were translated into Turkish or not, they automatically gained national standard status. For this reason, TSE had to translate all the standards that were needed by Turkish industry and public institutions from English into Turkish after the year of 2012. This obligation increased translation activities of TSE.

Before the year of 2016, translations of standards were conducted by technical committees of Construction Board and/or by “reporters” that were employed from outside. Reporters were not either centralized or given any explicit instruction how to translate. The translations of reporters were sent to related technical committees, public institutions, leading firms operating in the sector and, if relevant, academic institutions with the aim of controlling and final checking for accuracy of translations. At the end of these steps, the translation process was completed and CEN and/or ISO standards were published in Turkish. However, it was seen that the quality of translation of standards was not satisfying for several reasons.

However, one of the most important factors that affected the quality of translation was the lack of a guideline of translation, which would be accepted by all technical committees. Many decisions and regulations on standard preparation and translation norms that were forced by the authorized bodies of the TSE were in force before 2016. Moreover, these decisions were disorganized and undergone many changes at different times, therefore they were not working as binding texts. In 2015, the TSE faced major challenges in this regard. The problems were discussed and listed as follows:

1) The complaints of the users of standards had increased on the quality of translation of standards. Industrialists who wanted to comply with Turkish standards and buy Turkish standard from TSE began to state that the Turkish standards had so many mistakes. Companies with English-speaking staff started to use standards directly written in English, rather than their translations. However, companies that did not have English-speaking staff in their bodies began to demand for accurately translated standards. As a result, differences in implementation of standards arose due to inconsistency between the source text and its translation.

2) The second problem was the cost of the translations, which put an excessive financial burden on the TSE for being above the market averages.

3) The other problem was that the translations conducted by reporters took too much time because they needed to be controled by the technical committees and other institutions.

All the factors above had an influence on the quality of translation of standards. In August 2015, TSE who wanted to improve the quality of translation of standards went through a change in translation policy receiving consultancy services from a specialist faculty member Assoc. Prof. Dr. Ender Ateşman who is an expert on technical translation and standards. As a result of the studies conducted in order to solve translation problems and decrease in translation quality, introduction of a Standard Preparation Guide was suggested with the aim of setting a framework of preparation and translation of standards in a standard way.

The Standard Preparation Guide, which was prepared by translation technical committees, standard preparation and translation specialists and professional translators, has started to be applied since October 2016. The guide is presented in Appendix 2.

TSE presently embodies two Translation Technical Committees, which are *TK 43* and *TK 44 Translation Technical Committees* operating since August 2015 and consisting of professional translators and experts in Turkish language. Because the standards in the field of construction are randomly chosen in this study, detailed information about translators is not available.

To sum up, in this chapter, standards have been introduced touching upon their linguistic, stylistic and contextual features, which play an important role in the translation quality assessment strategies. In addition, it has been delved into the features of translated Turkish standards touching upon the translation process of them. Finally, the significance of the field of construction and the significance of the introduction of the standard developing and translation guide (2016) has been explained. The next chapter will present the analysis of translations.

CHAPTER 3
TRANSLATION QUALITY ASSESMENT OF TSE STANDARDS IN THE FIELD OF CONSTRUCTION TRANSLATED FROM ENGLISH INTO TURKISH: EXAMINING THE EFFECT OF COMMISSION IN THE LIGHT OF SKOPOS THEORY

This chapter presents the analysis of translations of Turkish standards translated from English into Turkish, the quality of which was examined according to the Multidimensional Quality Metrics (MQM) translation quality assessment model. Firstly, the standards which were translated from English to Turkish in the period of "before 2016" will be analyzed, and secondly the standards which were translated "after the year 2016" will be analyzed. Then, the results related to the quality of the translation of these two corpora will be compared and discussed in terms of their error types, weightings, i.e. minor, major, critical, and their quantity.

3.1. ANALYSIS OF TRANSLATION QUALITY ASSESSMENT OF CORPUS 1

This section presents analysis of translation quality of corpus 1 (C1) consisting of ten randomly chosen standards that were translated from English into Turkish before the year of 2016. In analysis, 38685 words were examined, translation errors were identified and classified according to their error types. The data analysis revealed that there were 544 incorrect instances of translation, which is equal to 1.4% of all lexical items revised. A detailed data analysis is presented in Appendix 1.

Table 4 below presents the summary of error types, their weightings (minor, major, critical) and their quantity found in C1.

Table 4. Summary of Translation Errors Found in C1

Error types	**Minor errors**	**Major errors**	**Critical errors**	**Total**
Accuracy: Mistranslation	18	30	5	**53**
Accuracy: Omission	12	54	1	**67**
Accuracy: Addition	44	9	1	**54**
Accuracy: Untranslated	0	0	1	**1**
Accuracy: Terminology	2	10	1	**13**
Fluency: Ambiguity	0	8	0	**8**
Fluency: Inconsistency	16	25	0	**41**
Fluency: Spelling	2	6	0	**8**
Fluency: Style Guide	15	49	0	**64**
Fluency: Typography	8	8	0	**16**
Fluency: Grammar	19	17	0	**36**
Fluency: Locale Conv.	1	0	0	**1**
Verity: Legal Requirements	0	0	0	**0**
Verity: Locale-S. Content	0	3	0	**3**
Design: Layout	5	9	0	**14**
Design: Local Formatting	147	8	0	**155**
Design: Graphics & Tables	8	2	0	**10**
Total	**297**	**238**	**9**	**544**

As it is evident from Table 4, among the 544 total instances of translation errors, 53 instances were defined as Mistranslation errors, 67 as Omission errors, 54 as Addition errors, 1 as Untranslation errors, 13 as Terminology errors, 8 as Ambiguity errors, 41 as Inconsistency errors, 8 as Spelling errors, 64 as Style Guide errors, 16 as Typography errors, 36 as Grammar errors, 1 as Locale Convention errors, 3 as Locale-specific Content errors, 14 as Layout errors, 155 as Local Formatting errors, and 10 as Graphics and Tables errors. The data analysis revealed that there was no translation error in the category of Legal Requirement in C1.

Each type of the detected translation errors is discussed separately below. All the errors related to a certain error type were classified according to the degree of severity as minor, major and critical.

3.1.1. Accuracy

The errors in translation accuracy refer to instances where the target text (the TT) does not accurately reflect the source text (the ST). Toury (2012), defines accuracy as "adherence to source norms" (p. 56). Likewise, according to the model of translation quality assessment "Accuracy issues address the relationship of the TT to the ST and can be assessed only by considering this relationship. Unnecessary changes in intended meaning, addition and omission of content, and similar issues such as mistranslation are considered in it" (Lommel et al., 2015b). The category of accuracy comprises several error types such as Mistranslation errors, Omission errors, Addition errors, Untranslation errors and Terminology errors, all of which will be addressed separately.

3.1.1.1. Mistranslation Errors

Mistranslation errors occur when the content of the TT does not correctly and accurately represent the content of the ST. If the TT reflects problems in conveying some items such as date/time, unit conversions, false friends, numbers, entity names, literal translation and over translation, then mistranslation occurs in that translation (Lommel et al., 2015b).

The data analysis revealed that, there were 53 mistranslation errors in C1, which is equal to 9.7% out of the total number of errors. Among the Mistranslation errors, 18 instances were defined as minor, which is equal to 3.3% out of the total number of errors. Example 1 illustrates a minor Mistranslation error found in C1. (All the examples presented in the study were chosen randomly and, therefore can be defined as illustrative).

Example 1

Minor error

SOURCE TEXT	TARGET TEXT
This document (EN ISO 11904-2:2004) has been prepared by Technical Committee ISO/TC 43 "Acoustics" in collaboration with Technical Committee CEN/TC 211 "Acoustics", the secretariat of which is held by DS. (EN ISO 11904-2, 2004, p. 2)	**Bu standard** (EN ISO 11904-2: 2004), Uluslararası Standardizasyon Teşkilatı (ISO) bünyesindeki ISO/TC 43, "Akustik" Teknik Komitesi ve sekretaryası DS tarafından gerçekleştirilen CEN/TC 211 "Akustik" Teknik Komitesi'nin işbirliği ile hazırlanmıştır. (TS EN ISO 11904-2, 2005, p. 2)

In Example 1, the phrase of "this document" in the ST was translated as *"bu standard" [this standard]*. Although a standard could be defined as a type of a document, the source word "document" should have been translated as *"doküman"* which is the correct equivalent of the source word and which means "a writing which refers to a truth or phenomenon" (Tdk.gov.tr). The word choice of the translators was defined as a mistranslation error, because the ST item stated a general type of the text while the TT item stated a specific type of the text, as it is classified in MQM issue type definitions (2015).

The Mistranslation error presented in Example 1 was defined as minor, because it was an error that "does not impact usability or understandability of the content" (Lommel et al., 2015b).

As for major Mistranslation errors, the data analysis revealed that there were 30 instances of them, which is equal to 5.5% out of the total number of errors. Example 2 illustrates a major Mistranslation error found in C1.

Example 2

Major error

SOURCE TEXT	**TARGET TEXT**
The result shall be expressed as **a percentage to one decimal place.** (EN 13286-44, 2003, p. 6)	Sonuç, **noktadan sonra bir basamaklı, yüzde olarak** ifade edilmelidir. (TS EN 13286-44, 2004, p. 6)

In Example 2, the statement of "a percentage to one decimal place" was translated literally as *"noktadan sonra bir basamaklı, yüzde olarak" [after point, one digit, in percent]*. "One decimal place" means "the position of a digit to the right of a decimal point" in English (Oxforddictionaries.com). It can be seen that *"noktadan sonra bir basamaklı"* is a word-for-word Turkish translation of the ST item. The statement in the Turkish language *"ondalık basamak yüzdesi"* meaning exactly "one decimal place" (Tdk.gov.tr) would be the correct translation of the statement. In this way, the reader would comprehend the intended meaning of the text. This example was classified under Mistranslation, since a literal translation strategy was adopted, which is likely to mislead the reader.

The Mistranslation error presented in Example 2 was defined as major, because it was an error that "impacts usability or understandability of the content but which does not render it unusable" (Lommel et al., 2015b).

As for critical Mistranslation errors, the data analysis revealed that there were 5 critical Mistranslation errors in C1, which is equal to 0.9% out of the total number of errors. Example 3 illustrates a critical Mistranslation error found in C1.

Example 3

Critical error

SOURCE TEXT	**TARGET TEXT**
The text of ISO 12571:2013 has been approved by CEN as **EN ISO 12571:2013** without any modification. (EN ISO 12571, 2013, p. 3)	ISO 12571:2013 standardının metni, CEN tarafından **EN ISO 10571:2013** olarak hiçbir değişiklik yapılmaksızın kabul edilmiştir. (TS EN ISO 12571, 2014, p. 3)

In Example 3, the number of the standard in the ST was not correctly translated in the TT. The number in the ST was "12571:2013" whereas in the TT it was "10571:2013". These numbers indicate the name and the year of a standard, which are unique and serve as the reference to the standard. Because of the wrong translation of the number in this case, the uniqueness of the standards disappeared. Complying with the definition of mistranslation issue type in terms of data (number) accuracy, this error was classified under mistranslation issue type.

The Mistranslation error presented in Example 3 was defined as critical, because it was an error that "renders the content unfit for use" (Lommel et al., 2015b).

3.1.1.2. Omission Errors

Omissions refer to errors that occur when a content of the ST is missing in the TT. If the TT failed in conveying data or elements of the ST, then the instances of missing information were considered as an Omission error in the present study.

The data analysis revealed that, there were 67 Omission errors in C1, which is equal to 12.3% out of the total number of errors. Among the Omission errors, 12 instances were defined as minor, which is equal to 2.2% out of the total number of errors. Example 4 illustrates a minor Omission error found in C1.

Example 4

Minor error

SOURCE TEXT	**TARGET TEXT**
For undated references, the latest edition of the referenced document **(including any amendments)** applies. (EN 1097-10, 2014, p. 5)	Tarih belirtilmemiş atıflarda, atıf yapılan dokümanın en son baskısı **(tadiller dâhil)** kullanılır. (TS EN 1097-10, 2014, p. 5)

In Example 4, the source word "any" which means *"tüm"* in Turkish (Oxforddictionaries.com) was omitted in the TT.

The Omission error presented in Example 4 was defined as minor, because it did not change the main meaning of the context. It was an error that "does not impact usability or understandability of the content" (Lommel et al., 2015b).

As for major Omission errors, the data analysis revealed that there were 54 major Omission errors in C1, which is equal to 9.9% out of the total number of errors. Example 5 illustrates a major Omission error found in C1.

Example 5

Major error

SOURCE TEXT	**TARGET TEXT**
For testing noise barriers, the specimen shall be placed directly against one of the surfaces (floor, wall or ceiling) of the chamber without any gap **(see Figure 1, Figure 2 and Figure 3)**. (EN 16272-1, 2012, p. 6)	Gürültü bariyerlerinin deneye tabi tutulması için, deney numunesi doğrudan deney odasının yüzeylerden birinin karşısına herhangi bir boşluk olmadan (zemin, duvar veya tavan) yerleştirilmelidir. (TS EN 16272-1, 2013, p. 6)

In Example 5, the statement “see Figure 1, Figure 2 and Figure 3” written in parenthesis in the ST was omitted in the TT. The translators were expected to translate this kind of supportive sentences especially in informative texts such as standards. Figures given in a standard may play important roles in the accurate construction and/or instruction of a system, composition or service.

The Omission error presented in Example 5 was defined as major, because the TT failed to convey the instructive structure of the ST to the TT, and impacted understandability of the content.

As for critical Omission errors, the data analysis revealed that there was one instance of a critical Omission error, which is equal to 0.2% out of the total number of errors. Example 6 illustrates the critical Omission error found in C1.

Example 6

Critical error

SOURCE TEXT	**TARGET TEXT**
Condition the test specimens, prior to testing, for **at least** 20 h in a standard atmosphere of (23 ± 2) °C and (50 ± 5) % relative humidity. (EN 12311-2, 2013, p. 6)	Deneyden önce deney numuneleri, (23 ± 2) ºC sıcaklık ve % (50 ± 5) bağıl neme sahip standart bir ortamda **en** 20 saat süreyle şartlandırılmalıdır. (TS EN 12311-2, 2015, p. 6)

In Example 6, “at least” meaning “at the minimum” (Oxforddictionaries.com) in the ST was translated as *“en”* in the TT, which is a statement expressing superiority, rather than “minimum” or “at least”. It is clear that the word *“az”*, which is a Turkish word meaning “minimum”, was omitted in the translation process.

The Omission error presented in Example 6 was defined as critical due to the ambiguity it created in the TT. A reader may infer from the TT both *“en az” [at least]* and *“en fazla” [at most]* which may confuse the reader and lead to a critical failing in application of the standard.

3.1.1.3. Addition Errors

Addition errors refer to items such as words, punctuation marks, numbers, graphics and tables, etc. that were inserted to the TT, though those items were not present in the ST. Addition errors may undermine a smooth flow of reading in a text and/or change the meaning intended in the ST.

The data analysis revealed that there were 54 Addition errors in C1, which is equals to 9.9% out of the total number of errors. Among the Addition errors, 44 instances were defined as minor, which is equal to 8.08% out of the total number of errors. Example 7 demonstrates a minor Addition error observed in C1.

Example 7

Minor error

SOURCE TEXT	**TARGET TEXT**
Infiltrometer, with dimensions specified in 4.1.1, 4.1.2 and 4.1.3, consisting of one or two metal cylinders (see Figure 1) capable of being sealed onto, or hammered perpendicularly into, the sports surface, as appropriate to minimise lateral leakage. (EN 12616, 2013, p. 4)	İnfiltrometre, spor sahası yüzeyi üzerine sızdırmaz şekilde yerleştirilebilen veya saplanacak şekilde yüzeye çevresel olarak çakılabilen, boyutları **Madde 4.1.1, Madde 4.1.2 ve Madde 4.1.3**'te belirtildiği gibi olan bir veya iki metal silindirden oluşan (Şekil 1'e bakınız) ve yanal su sızıntısını en aza indirmeye uygun olan. (TS EN 12616, 2014, p. 4)

In Example 7, the ST item of "4.1.1, 4.1.2 and 4.1.3" refers to the clauses of the related standard. According to, Internal Regulations Guide "the terms which shall be used to designate the divisions and subdivisions that a document shall be in a plain number, i.e. 1.1.1" (IR 3, 2011/2015, p. 16). Accordingly, the word *"madde" [clause]* was defined as an addition error violating the requirements of the guide. However, for being an error that "did not impact usability or understandability of the content" (Lommel et al., 2015b), the Addition error presented in Example 7 was defined as minor.

As for major Addition errors, the data analysis revealed that there were 9 of them in C1, which is equals to 1.65% out of the total number of errors. Example 8 shows a major Addition error found in C1.

Example 8

Major error

SOURCE TEXT	**TARGET TEXT**
This document (EN ISO 12571:2013) has been prepared by Technical Committee ISO/TC 163 "Thermal performance and energy use in the built environment" in collaboration with Technical Committee CEN/TC 89 “Thermal performance of buildings and building components” the secretariat of which is held by SIS. (EN ISO 12571, 2013, p. 3)	Bu doküman (EN ISO 12571:2013), Uluslararası Standardizasyon Kuruluşu (ISO), ISO/TC 163 "Thermal performance and energy use in the built environment" Teknik Komitesi ile sekreteryası SIS tarafından yürütülen CEN/TC 89 “Thermal performance of buildings and building components” birlikte **EN ISO 10581:2013 olarak kabul edilmiştir.** (EN ISO 12571, 2014, p. 3)

In Example 8, the statement of *“EN ISO 10581:2013 olarak kabul edilmiştir” [accepted as EN ISO 10581:2013]* was added to the translation, though it did not present in the ST. The translators might deliberately have added the statement into the translation from their background knowledge or the addition observed in Example 8 might have risen from a mistake happened in the copy-paste process. Under any circumstances, the addition in this example impacts the understandability of the text. Therefore, the addition error presented in Example 8 was defined as major for impacting usability and understandability of the TT.

As for critical Addition errors, there was one critical Addition error in C1, which is 0.18% out of the total number of errors. Example 9 shows the critical Addition error found in C1.

Example 9

Critical error

SOURCE TEXT	**TARGET TEXT**
When I/p > 1 there is a ridge; at lower ratio there are bumps. (EN 13036-8, 2008, p. 9)	I/p > 1 olduğunda tümsek; **I/p ≤ 1** olduğunda yayvan tümsek olarak adlandırılır. (TS EN 13036-8, 2009, p. 9)

In Example 9, "I/p ≤ 1" statement was added to the TT in the place of "at lower ratio" statement. The symbol "≤" means "less than or equal to something" while the ST states "at lower ratio" means "less than" not "equal". This translation error may mislead the reader in determination of a bump.

The Addition error presented in Example 9 was defined as critical due to the addition of a different statement from what was stated in the ST. A reader is likely to infer the meanings of both "lower" and "equal" from the TT. This error may lead to a critical failing in application of the standard, because it may "render the content unfit for use" (Lommel et al., 2015b).

3.1.1.4. Untranslation Errors

Untranslation errors refer to content "that should have been translated, but was left untranslated" (Lommel et al., 2015b). Such items are likely to mislead the reader, i.e. a possible practitioner of the standard is likely to fail in applying a construction or a test.

The data analysis revealed that neither minor nor major Untranslation errors were detected in C1. The data analysis revealed that there was one critical Untranslation error in C1, which is equal to 0.18% out of the total number of errors. Example 10 illustrates the critical Untranslation error found in C1.

Example 10

Critical error

SOURCE TEXT	**TARGET TEXT**
Table A.1 **Relative humidity %** (EN ISO 12571, 2013, p. 10)	Çizelge A.1 **Relative humidity %** (EN ISO 12571, 2014, p. 10)

In Example 10, the title of "relative humidity" of the table in the ST was not translated in the TT. The source item "relative humidity" means "the amount of water vapor present in air expressed as a percentage of the amount needed for saturation at the same temperature" (Oxforddictionaries.com) and this term is expressed with a percentage number. Even if the numbers were shown in the table, a reader might not understand that those numbers show relative humidity percentages.

The Untranslation error presented in Example 10 was defined as critical, because of the fact that a non-speaker of English reader may fail to understand the text correctly. Consequently, this error is likely to lead the reader to fail in the application of the test described in the table.

3.1.1.5. Terminology Errors

Errors in terminology occur when a term in the ST is translated in the TT with a term other than the one expected for the domain, unless otherwise is specified. Analogously, in the present study an error was defined as related to terminology, if the TT did not meet the requirement of expected and/or related stereotyped terminology.

The data analysis revealed that there were 13 Terminology errors in C1, which is equal to 2.38% out of the total number of errors. Among them 2 instances were defined as minor, which is equal to 0.36% of the total number of errors. Example 11 illustrates a minor Terminology error found in C1.

Example 11

Minor error

SOURCE TEXT	TARGET TEXT
If **steady-state** is not achieved after 20 min, pond water until the water level in the inner cylinder has fallen by 25 mm from an initial level of 35 mm to 45 mm. (EN 12616, 2013, p. 8)	**Sabit su seviyesine** 20 dakika sonra ulaşılamaz ise, iç silindirdeki su seviyesi, başlangıç seviyesi olan 35 mm ila 45 mm'den 25 mm düşünceye kadar su doldurmaya devam edilir. (TS EN 12616, 2014, p. 7)

In Example 11, the term "steady-state" was defined as "an unvarying condition in a physical process" in terminology of the related standard. However, it was translated as *"sabit su seviyesi" [static water level]*. Although there was a suitable terminology as *"sabit seviye" [steady-state]*, the translators did not prefer to use it.

The Terminology error presented in Example 11 was defined as minor because, although the terminology choice was not complying with the domain of the standard, the text was still understandable and it was an error that does not impact the usability of the text.

As for major Terminology errors, the data analysis revealed that there were 10 of them, which is equal to 1.83% of the total number of errors. Example 12 illustrates a major Terminology error found in C1.

Example 12

Major error

SOURCE TEXT	TARGET TEXT
Apparatus (EN 13286-44, 2003, p. 5)	Deney Düzeneği (TS EN 13286-44, 2004, p. 4)

In Example 12, the term “apparatus” was used as the title of the part in the ST in which devices to be used were listed. In the IR 3 guide, the term “apparatus” was defined as “a conditional element giving a list of the apparatus used in the document. The rules for the structure, numbering and presentation of the “Apparatus” clause were identical to those for the ‘Reagents and/or materials’ ” (IR 3, 2015, p. 27). As it can be inferred from the definition, the term “apparatus” should have been translated in such way so that it could convey the meaning “device” or “material”. The word *“cihazlar” [apparatus]* would be the correct Turkish for the term. Though the meaning of the term as “device” or “material” was suggested by the standards guide, the translators chose a different terminology in the TT; therefore, this instance was classified under the terminology error type.

The Terminology error presented in Example 12 was defined as major, because it was an error that impacts usability and understandability of the TT.

As for critical Terminology errors, the data analysis revealed that there was one instance defined as critical, which is equal to 0.18% out of the total number of errors. Example 13 illustrates the critical Terminology error found in C1.

Example 13

Critical error

SOURCE TEXT	**TARGET TEXT**
Take at least six **readings** at random on sports surfaces of less than 100 m^2. (EN 12616, 2013, p. 7)	Alanı 100 m^2’den küçük spor sahası yüzeylerinde rastgele seçilen konumlarda en az altı **deney ölçümü** yapılır. (TS EN 12616, 2014, p. 6)

In Example 13, according to “the terms and definitions part” in the ST the statement of “reading” in the ST refers to the “a figure or amount shown by a meter or other measuring instrument” which corresponds to the *“gösterge değeri”* in Turkish. On the other hand, *“deney ölçümü” [test measurement]* which is not a suitable terminology set to the standards.

The Terminology error presented in Example 13 was defined as critical because of the fact that the usage of the wrong terminology might lead to the reader a failing in application of the standard. With the term *"deney ölçümü" [test measurement]* which carries the meaning of "the action of measuring something" (Oxforddictionaries.com), the reader may infer that she/he needs to measure something to perform the procedure; however, the reader is expected just to read a figure or amount shown on a measuring device. Regarding this, the issue was defined as a critical error, based upon the possibility of "rendering the content unfit for use" (Lommel et al., 2015b).

3.1.2. Fluency

Fluency refers to the quality of a text in terms of being linguistically well-formed and understandable. According to MQM translation quality assessment model, while the accuracy errors need to be observed by comparing both a ST and a TT, fluency errors can be identified in the ST or TT on their own. The category of fluency comprises the following error types, all of which will be addressed separately: Ambiguity errors, Inconsistency errors, Spelling errors, Style Guide errors, Typography errors, Grammar errors and Locale Convention errors.

3.1.2.1. Ambiguity Errors

Ambiguity errors refer to instances that occur when a word, a phrase or a sentence in a text has an ambiguous or equivocal meaning in itself. In texts which have an expressive function ambiguity can be created by conscious of the author or the translator on purpose. However, in technical texts, especially in standards, rules and vocabulary are specifically designed to reduce ambiguity to the minimum because of their nature, technical texts need intelligibility. Therefore, if there is an ambiguity in a ST, it should not be transferred into the TT; on the other hand, if there is an ambiguity in the TT, that ambiguity is likely to be a translation error.

The data analysis revealed that there were 8 Ambiguity errors in C1, which is equal to 1.47% out of the total number of errors. Among the Ambiguity errors, neither minor nor critical errors were observed, but the 8 instances were defined as major, which is equal

to 1.47% out of the total number of errors. Example 14 illustrates a major Ambiguity error found in C1.

Example 14

Major error

SOURCE TEXT	**TARGET TEXT**
CEN members are the national standards bodies of Austria, Belgium, Bulgaria, **Cyprus**, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom. (EN 14488-8, 2006, p. 1)	CEN üyeleri sırasıyla, Almanya, Avusturya, Belçika, Birleşik Krallık, Bulgaristan, Çek Cumhuriyeti, Danimarka, Estonya, Finlandiya, Fransa, Hollanda, İrlanda, İspanya, İsveç, İsviçre, İtalya, İzlanda, **Kıbrıs**, Letonya, Litvanya, Lüksemburg, Macaristan, Malta, Norveç, Polonya, Portekiz, Romanya, Slovakya, Slovenya ve Yunanistan'ın millî standard kuruluşlarıdır. (TS EN 14488-8, 2006, p. 1)

In Example 14, the state "Cyprus" in the ST was translated into Turkish as *"Kıbrıs"* which is the correct equivalent of the word in Turkish; however, Cyprus Island comprises two states. One is *Greek Cypriot Administration of Southern Cyprus* and the other is *Turkish Republic of Northern Cyprus*, which is not a recognizable state for the UN (mfa.gov.tr). Although the intended meaning of "Cyprus" referred to the Greek Cyprus State for being a member of CEN institute in the ST, the word *"Kıbrıs"* might evoke Turkish reader to the Turkish Cyprus State for being the local autonomy of Turkey in the TT. For that reason, the translation of the state as *"Kıbrıs"* might cause an ambiguity in target culture. It could have been translated with a clarification such as *"Kıbrıs (Güney Kıbrıs Rum Cumhuriyeti)" [Cyprus (Greek Cypriot)]*, which would reduce the ambiguity in the target language.

The Ambiguity error presented in Example 14 was defined as major because it was an error that "impacts usability or understandability of the content but which does not render it unusable" (Lommel et al., 2015b).

3.1.2.2. Inconsistency Errors

Errors related to inconsistency occur in texts that are marked with inconsistency in translation. It can be argued that technical texts need to be consistent because they need to be written and translated in using a clear and understandable language. If the TT reflected some problems in being consistent in some items such as abbreviations, discourse, terminology and images or design, then they were defined as Inconsistency errors in the present analysis.

The data analysis revealed that there were 41 instances of Inconsistency errors in C1, which is equal to 7.5% out of the total number of errors. Among the Inconsistency errors, 16 instances were defined as minor, which is equal to 2.9% out of the total number of errors. Example 15 demonstrates a minor Inconsistency error found in C1.

Example 15

Minor error

SOURCE TEXT	**TARGET TEXT**
a) 6.3 and 6.4, **minimum** size of vessel and moisture container have been reduced; c) Clause 7, Table 2, **minimum** volume of test portion has been reduced; (EN 1097-10, 2014, pp. 3-4)	a) Madde 6.3 ve Madde 6.4: kabın ve rutubet kabının **en az** olarak belirtilen boyutları düşürülmüştür, c) Madde 7, Çizelge 2: deney numunesi **asgari** hacmi düşürülmüştür, (TS EN 1097-10, 2014, pp. 3-4)

In Example 15, the word "minimum" was translated inconsistently as both *"en az" [at least]* and *"asgari" [minimum]*. Multiple translation of a word can be classified under "terminological inconsistency".

The Inconsistency error presented in Example 15 was defined as minor, because the reader may infer the intended meaning from both of the translations since they have a close meaning in this context. Therefore, the inconsistency presented above does not impact the meaning but creates a difficulty in reading to the reader.

As for major Inconsistency errors, the data analysis revealed that there were 25 major Inconsistency errors, which is equal to 4.6% out of the total number of errors. Example 16 illustrates an Inconsistency error defined as major found in C1.

Example 16

Major error

SOURCE TEXT	**TARGET TEXT**
Overall flatness (2 m **straightedge**) Local flatness (20 cm **ruler**) The check is carried out with a 2 m long **straightedge**, "L", and a 20 cm long **ruler**. (CEN/TR 15739, 2008, pp. 11-12)	Toplam düzgünlük (2 m'lik **cetvel** ile) Bölgesel düzgünlük (20 cm'lik **cetvel** ile) Kontrol işlemleri, 2 m uzunluğunda bir **gönye**, "L", ve 20 cm uzunluğunda bir **cetvel** ile gerçekleştirilir. (TS CEN/TR 15739, 2010, pp. 11-12)

In Example 16, the term "straightedge" was translated as both *"cetvel" [ruler]* and *"gönye" [set-square]*. "Ruler" and "straightedge" are used to measure length or check if a surface is flat and draw a straight whereas *"gönye" [set-square]* is used to draw right angle with its triangle shape. The term "straightedge" would have translated as *"mastar"* which means "long, thin and flat board used as a ruler in construction" (Tdk.gov.tr). The multiple translations of the term were likely to affect the readability and applicability of the translation. For that reason, this terminological incompatibility was classified under the Inconsistency error type.

The Inconsistency error presented in Example 16 was defined as major, because it was an error that "impacts usability or understandability of the content but which does not render it completely unusable" (Lommel et al., 2015b).

As for critical Inconsistency errors, none of them was detected in C1.

3.1.2.3. Spelling Errors

Spelling error refers to errors related to a wrong orthography and spelling of a word. For detecting error type, both a comparative analysis between the ST and the TT; and a descriptive analysis of the TT were conducted. Spelling errors comprise capitalization and diacritics errors.

The data analysis revealed that, there were 8 Spelling errors in C1, which is equal to 1.5% out of the total number of errors. Among the Spelling errors, 2 instances were defined as minor, which is equal to 0.4% out of the total number of errors. Example 17 illustrates a minor Spelling error found in C1.

Example 17

Minor error

SOURCE TEXT	**TARGET TEXT**
[…] measured with the microphone of an ear **simulator** […] (EN ISO 11904-2, 2004, p. 2)	[…] mankene takılı kulak **simülâtörünün** mikrofonu ile ölçülen […] (TS EN ISO 11904-2, 2005, p. 1)

In Example 17, the source word "simulator" was translated as *"simülâtör"*. The Turkish word *"simülator" [using the letter a]* was spelled in the TT as *"simülâtör" [using the letter â with an accent]*, which is not found in Turkish (Tdk.gov.tr).

The Spelling error presented in Example 17 was defined as minor because the reader is likely to understand the meaning of the word notwithstanding the incorrect spelling, and the error does not change the meaning of the word but creates a difficulty in reading.

As for major Spelling errors, the data analysis revealed that there were 6 instances of them, which is equal to 1.1% out of the total number of errors. Example 18 illustrates a major Spelling error observed in C1.

Example 18

Major error

SOURCE TEXT	**TARGET TEXT**
If the sample under test includes **a post** having a thickness larger than that of the acoustic elements and protruding toward the interior of the test chamber, the reflective area created by the post fitting the acoustic elements shall be reproduced covering it by reflective strips. (EN 16272-1, 2012, p. 6)	Deneye tabi tutulan numune üzerinde akustik elemanlardan daha geniş bir kalınlığa sahip ve deney odasının içine doğru giren bir direk **bulunuyora**, akustik elemanı tutan direk tarafından oluşturulan yansıtıcı alan yansıtıcı çubuklar kullanılarak tekrar kapatılmalıdır. (TS EN 16272-1, 2013, p. 6)

In Example 18, the structure of "if" indicating presence of a possible "post", which means "a long, sturdy piece of timber or metal set upright in the ground and used as a support or marker" (Oxforddictionaries.com) in the ST, was translated as *"bulunuyora" [in the meaning of 'if there is a post', but misspelled]*. Misspelling of the verb as *"bulunuyora"*, instead of *"bulunuyor**sa**"* is likely to lead the reader to ambiguity, because in Turkish language conditional structures are formed with *"-se, -sa"* suffixes. Based on this rule, by reason of misspelling of the verb, the reader of the TT would not comprehend the conditional structure that should have been in the TT.

The Spelling error presented in Example 18 was defined as major, because this error was likely to "impact usability or understandability of the content but which does not render it completely unusable" (Lommel et al., 2015b).

As for critical Spelling errors, none of them were observed in C1.

3.1.2.4. Style Guide Errors

Style Guide errors occur in translations when there are violations of the style defined in a normative specification given by a company, institution or organization etc. to be used

in the translation process. In the present study, there were two main guidelines for developing and translating standards. The first is Internal Regulations, which provides rules for the structure and drafting of CEN/CENELEC Publications, i.e. the standards studied in the present study, and the second is the Turkish Standards Preparation Guide, which provides rules for the structure and translation of standards to be developed or adopted by translators. Instances in C1 that did not comply with the rules of Internal Regulations Guide were classified under the Style Guide error type in the present study.

The data analysis revealed that there were 64 Style Guide errors in C1, which is equal to 11.7% out of the total number of errors. Among the Style Guide errors, 15 instances were defined as minor, which is equal to 2.7% out of the total number of errors. Example 19 illustrates a minor Style Guide error found in C1.

Example 19

Minor error

SOURCE TEXT	**TARGET TEXT**
EN 13416, Flexible sheets for waterproofing — Bitumen, plastic and rubber sheets for roof waterproofing — Rules for sampling (EN 12311-2, 2013, p. 5)	EN 13416: 2000, Flexible sheets for waterproofing - Bitumen, plastic and rubber sheets for roof waterproofing - Rules for sampling **(Su yalıtımı için esnek levhalar- Çatılarda su yalıtımı için kullanılan bitümlü, plastik ve kauçuk levhalar- Numune alma kuralları)** (EN 12311-2, 2015, p. 5)

In Example 19, the source statement was a title of another standard which was used to give reference to the present standard and listed under the clause of *Normative References*. This title was conveyed to the TT with its original sentences and also with its Turkish translation in the parenthesis. However, according to the Turkish Standards Preparation Guide, titles of the documents under *Normative References* article shall not be translated into Turkish, they should remain in the original language (TSE, 2016, p.

28). The IR3 guide (2011,2015) runs “the titles of international standards under the clause of Normative References shall remain unaltered by translation and given in the original language, i.e. English or French.” (p. 89). On the basis of this rule, the instance presented in Example 19 was classified under the Style Guide error category.

The Style Guide error presented in Example 19 was defined as minor because it did not impact the understandability of the text with the extra information given in parenthesis.

As for major Style Guide errors, the data analysis revealed that there were 49 instances of them, which is equal to 9% out of the total number of errors. Example 20 illustrates a major Style Guide error found in C1.

Example 20

Major error

SOURCE TEXT	**TARGET TEXT**
After (24 ± 2) **h**, (48 ± 4) **h**, (72 ± 4) **h** and (168 ± 4) **h**, wait (5,0 ± 0,5) **min**. (EN 1097-10, 2014, p. 10)	(24 ± 2) **saat**, (48 ± 4) **saat**, (72 ± 4) **saat** ve (168 ± 4) **saat** sonra, (5,0 ± 0,5) **dakika** beklenir. (TS EN 1097-10, 2014, p. 10)

In Example 20, the units of time were not translated in accordance with the rules of the standards guides. According to the IR3 guide (2011,2015), “units of measures shall be translated in accordance with international abbreviations, i.e. min, h, s” (p. 33). The abbreviated units in the ST of “h” and “min” would have been translated as *“(24 ± 2) h, (48 ± 4) h, (72 ± 4) h ve (168 ± 4) h sonra, (5,0 ± 0,5) min beklenir” [(24 ± 2) h, (48 ± 4) h, (72 ± 4) h and (168 ± 4) h, wait (5,0 ± 0,5) min]*. Based on this rule, the instance presented in Example 20 was classified under the Style Guide error category.

The Style Guide error presented in Example 20 was defined as major, because it was an error that “impacts usability or understandability of the content but which does not render it completely unusable” (Lommel et al., 2015b).

As for critical Style Guide errors, none of them were observed in C1.

3.1.2.5. Typography Errors

Typography errors refer to peculiarities observed in the mechanical presentation of a text such as incorrect usage of punctuations, missing blanks between lines and/or words, or unpaired quote marks. According to MQM model, this category should be used for any typographical errors other than spelling (Lommel et al., 2015b). For detecting the error type, both a comparative analysis between the ST and the TT; and a descriptive analysis of the TT were conducted.

The data analysis revealed that there were 16 Typography errors in C1, which is equal to 2.94% out of the total number of errors. Among the Typography errors, 8 instances were defined as minor, which is equal to 1.47% out of the total number of errors. Example 21 illustrates a minor Typography error found in C1.

Example 21

Minor error

SOURCE TEXT	**TARGET TEXT**
4.3.4 Sieve of 5 mm, **with bottom pan**. (EN 13286-44, 2003, p. 5)	4.3.4 Elek, göz açıklığı 5 mm olan **(tabanda tava ile birlikte)**. (TS EN 13286-44, 2004, p. 5)

In Example 21, the phrase of "with bottom pan" in the ST was parenthesized in the TT, although it was not written in parenthesis in the ST. In the ST, "with bottom pan" was in the focus position, because "a reader will unconsciously focus at the end of the sentence to identify what is important" (Öztürk, 2000, p. 476). The main context in the ST was also discussing the "bottom pan" on which the test would be carried out. On the other hand, the translation was presented as secondary and/or supplementary information, since it was included in the parenthesis.

The Typography error presented in Example 21 was defined as minor, because the parenthesized phrase could be read and applied by the reader in spite of being written with a different punctuation. It did not impact understandability of the TT.

As for major Typography errors, the data analysis revealed that there were 8 instances of them, which is equal to 1.47% out of the total number of errors. Example 22 illustrates a major Typography error found in C1.

Example 22

Major error

SOURCE TEXT	**TARGET TEXT**
A.1.3.1 Method of measuring rut depth ***R***	A.1.3.1 Tekerlek izi derinliğinin **(*R*)** ölçüm yöntemi

In Example 22, the letter "R" in the ST was parenthesized in the TT, although it was not written in parenthesis in the ST. There were formulas containing letter "r" written in parenthesis in the text, both the ST and the TT. Therefore, the punctuation choice of the translators might lead the reader to confusion.

The Typography error presented in Example 22 was defined as major, because it was an error that "impacts usability or understandability of the content" with the possible confusion of the terms (Lommel et al., 2015b).

As for critical Typography errors, none of them were observed in C1.

3.1.2.6. Grammar Errors

Chomsky (1965) defines grammar as "a system of rules that in some explicit and well-defined way assigns structural descriptions to the sentences" (p. 8). Every language has its own system as Chomsky defines. Translators should pay attention to the rules of those systems in the process of translation. When they fail, grammar related errors occur in the text or translation. In MQM context, errors related to grammar refer to "peculiarities in respect to grammar or syntax of the text, other than spelling and orthography" (Lommel et al., 2015b).

The data analysis revealed that there were 36 Grammar errors in C1, which is equal to 6.6% out of the total number of errors. Among the Grammar errors, 19 instances were defined as minor, which is equal to 3.5% out of the total number of errors. Example 23 illustrates a minor Grammar error found in C1.

Example 23

Minor error

SOURCE TEXT	**TARGET TEXT**
CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. (EN ISO 12571, 2013, p. 1)	**CEN üyeleri**, bu Avrupa Standardına hiçbir değişiklik yapmaksızın ulusal standard statüsü veren koşulları öngören CEN/CENELEC İç Tüzüğü'ne uymak zorundadır**lar**. (TS EN ISO 12571, 2014, p. 1)

In Example 23, "Cen members" was subject of the ST which was a collective noun and also a non-living object referring to member countries of CEN, "are bound to" was the predicate. They were translated as *"Cen üyeleri […] zorundadır**lar**" [in the meaning of 'CEN members are bound to' but plural suffix was added to the predicate]*. However, according to rules of Turkish Language grammar, the subject of the sentence affects the plurality of verb. If the subject refers to animals, non-living things or abstract concepts, then the predicate is always singular (Korkmaz, 2009, p. 258, my translation)

The Grammar error presented in Example 23 was defined as minor because, although the plural suffix which was added to the predicate in the TT, was an ungrammatical error in Turkish language, it was an error that "does not impact usability or understandability of the content" (Lommel et al., 2015b).

As for major Grammar errors, the data analysis revealed that there were 17 instances of them, which is equal to 3.1% out of the total number of errors. Example 24 illustrates a major Grammar error found in C1.

Example 24

Major error

SOURCE TEXT	**TARGET TEXT**
NOTE If larger weighing cups are used, the weighing accuracy **can be determined** with respect to the total mass and the required accuracy of the test results. (EN ISO 12571, 2013, p. 3)	Not – Daha büyük tartma kaplarının kullanılması durumunda, tartma hassasiyeti, toplam kütleye ve deney sonuçlarında gerekli hassasiyete göre **belirlenmelidir.** (TS EN ISO 12571, 2014, p. 3)

In Example 24, the verb "determine" in the ST was used with the modal "can" which conveys possibility. But, it was translated as *"belirlenmelidir" [shall/should be determined]* in the TT which conveys necessity. The IR 3 guide, which sets rules of standard texts states that "in language of standards, necessity and recommendation must be strictly separated. Do not use "can" instead of "shall/should" to express a prohibition, or vice versa." (pp. 75-76). This would avoid any confusion between the requirements of a document and external statutory obligations. In Example 24, the translation of the modal "can" as a verb that carries the meaning of necessity, instead of possibility, was likely to lead the reader to confusion and possible misinterpretation of the context.

The Grammar error presented in Example 24 was defined as major, because of creating confusion due to the wrong translation of the modal.

As for critical Grammar errors, none of them were observed in C1.

3.1.2.7. Locale Convention Errors

Locale convention errors refer to errors that do not adhere to locale-specific mechanical customs and violates requirements for the presentation of content in the target locale (Lommel et al., 2015b).

The data analysis revealed that there was one Locale Convention error in C1, which is equal to 0.18% out of the total number of errors. The only error related to locale convention was defined as minor. Example 25 illustrates the minor Locale Lonvention error found in C1.

Example 25

Minor error

SOURCE TEXT	**TARGET TEXT**
The force measuring system shall meet at least Class 2 of EN ISO 7500-1 (i.e. ± **2 %**). (EN 12311-2, 2013, p. 6)	Kuvvet ölçme sistemi, EN ISO 7500-1 de verilen en az Sınıf 2'yi (diğer bir deyişle ± **2%**'yi) sağlamalıdır. (TS EN 12311-2, 2015, p. 6)

In Example 25, the symbol for per cent was used after the number in the ST and this usage was conveyed to the TT in the same way. However, in Turkish, per cent and per mille symbols are written and spoken before the number, because the symbols are written in terms of the reading of the symbol and the number (Ersen-Rasch, 2013, p. 34), i.e. for reading of the source language 2%=two per cent (firstly the number is read, then per cent is read) whereas for reading of the target language *%2= yüzde iki [two per cent]* (firstly per cent is read, then the number is read). Based on this rule, the number "2%" in the ST should have been conveyed as "%2" to the TT.

The Locale Convention error presented in Example 25 was defined as minor, since it was an error that does not impact the meaning but creates difficulty in reading.

3.1.3. Verity

Verity refers to text appropriation for the target audience in MQM context. It occurs when the TT fails to meet "the suitability of content for the target locale and audience" (Lommel et al., 2015b). In other words, verity errors involve elements of the translation which pertain to the relevancy of the translation to the target audience. The category of

verity comprises two error types: the first is Legal Requirements errors and the second is Locale-specific Content errors, each of them will be addressed separately.

3.1.3.1. Legal Requirements Errors

Legal requirements errors refer to instance where a text does not meet legal requirements as set forth in the specification, i.e. infringement of rules of publishing or list of prohibited articles.

The data analysis revealed that no translation errors related to the infringement of a legal requirement were observed in the analysis of C1.

3.1.3.2. Locale-Specific Content Errors

Errors related to Locale-specific Content refer to instances that occur where "a content specific to the source locale does not apply to the intended target locale, audience, or purpose" (Lommel et al., 2015b).

The data analysis revealed that there were 3 Locale-specific Content errors in C1, which is equal to 0.55% out of the total number of errors. Among the Locale-specific Content errors, neither minor nor critical errors were observed; on the other hand, there were 3 errors defined as major, which is equal to 0.55% out of total number of errors. Example 26 illustrates a major Locale-specific Content error found in C1.

Example 26

Major error

SOURCE TEXT	TARGET TEXT
The appearance of a concrete surface is defined by three criteria denoted by a letter: **F – F**latness **T – T**exture **C – C**olour (CEN/TR 15739, 2008, p. 10)	Bir beton yüzeyinin görünümü, belirli bir harfle gösterilen 3 kriter ile tanımlanır: **F -** **D**üzgünlük **T -** **Y**apı **C -** **R**enk (TS CEN/TR 15739, 2010, p. 10)

In Example 26, each term was defined by a letter in the ST, these letters were the first letters of the defined English word. However, in the TT, the letters defining the words were not the first letters of the Turkish equivalent words, but they were still the first letters of the English words from the ST. The translators should have used the first letters of the Turkish equivalents in the Turkish TT, which would be more logical for the TT reader and would allow him/her to reach the relevant information in a simpler and accurate way.

The Locale-specific Content error presented in Example 26 was defined as major, because it was an error that "impacts usability or understandability of the content" by having a possibility of creating confusion and giving a practical reading problem arising from the wrong representation of the words.

3.1.4. Design

Design related errors refer to "issues related to the physical presentation of the text", in here the TT (Lommel et al., 2015b). According to Skopos theory, in order to achieve equivalence between the ST and the TT, needs of a target reader, as well as necessities and rules of a text type are in the priority of the translators (Reiss & Vermeer, 2013, pp. 143-145) because, functions are always linked to text types, conventions and specific

circumstances (ibid). As it is postulated by Skopos theory, not only lexical items, but also necessities of a text type, such as design, are included in the translation process. These requirements are important factors determining translation the quality of a text. The category of design comprises several error types such as Layout errors, Local-formatting errors and Graphics and Tables errors, all of which will be addressed separately.

3.1.4.1. Layout Errors

Layout refers to the way a text arranged in the context of MQM model. Items of the TT such as color, global font choice, footnotes/endnotes, headers/footers, margins, page breaks etc., which were not translated in accordance with the layout design of the ST were defined under Layout error type in the present study.

The data analysis revealed that there were 14 instances of Layout defined as erroneous in C1, which is equal to 2.57% of the total number of errors. Among the Layout errors, 5 instances were defined as minor, which is equal to 0.92% of the total number of errors. Example 27 demonstrates a minor Layout error found in C1.

Example 27

Minor error

SOURCE TEXT	**TARGET TEXT**
Annex D (informative) (CEN/TR 15739, 2008, p. 20)	Ek D (Bilgi için) (TS CEN/TR 15739, 2010, p. 20)

In Example 27, the target statement *"Ek D (Bilgi için*)", which was the title of an informative annex in the standard, was shifted to the previous page. As it is postulated by Skopos theory, not only lexical items, but also necessities of a text type such as the design are included in the translation process. These requirements are important in

determining translation quality of a text. This instance was defined as an error for not meeting the necessity of its text type in terms of conformity with the design.

The Layout error presented in Example 27 was defined as minor because, it did not impact the meaning but created difficulty in reading to the reader.

As for major Layout errors, the data analysis revealed that there were 9 layout errors defined as major, which is equal to 1.65% of the total number of errors. Example 28 illustrates a major Layout error found in C1.

Example 28

Major error

SOURCE TEXT	**TARGET TEXT**
All rights of exploitation in any form and by any means reserved worldwide for CEN national Members. (EN ISO 11904-2, 2004, p. 1)	Absent in the TT.

In Example 28, the sentence in the ST was about the copyrights of the standard and it was not translated in the TT. According to the IR 3 Guide, “the copyright statement of members shall exist on the footers” (p. 13). Accordingly, this error was classified under Layout error due to an absent footer.

The Layout error presented in Example 28 was defined as major for affecting usability and understandability of the TT.

As for critical Layout errors, none of them were detected in C1.

3.1.4.2. Local-Formatting Errors

Local-formatting errors occur when if a text has peculiarities related to the format. In the present study, instances related to the format in the TT which were not translated in accordance with norms of text type, i.e. informative text type here, were defined under

Local-formatting error type. The errors were categorized under this error category when they failed to meet expectations of the target reader and the text type criteria related to format such as text alignment, paragraph indentation, bold/italic, font, kerning, leading.

The data analysis revealed that there were 155 Local-formatting errors in C1, which is equal to 28.4% out of the total number of errors. Among them 147 instances were defined as minor, which is equal to 27% of the total number of errors. Example 29 illustrates a minor Local-formatting error found in C1.

Example 29

Minor error

SOURCE TEXT	**TARGET TEXT**
ISO 11904 consists of the following parts, under the general title *Acoustics — Determination of sound immission from sound sources placed close to the ear*: (EN ISO 11904-2, 2004, p. iv)	ISO 11904 Akustik- Kulağa yakın yerleştirilmiş ses kaynaklarından gelen ses kirliliğinin belirlenmesi ana başlığı altında, aşağıdaki bölümlerden oluşmaktadır: (TS EN ISO 11904-2, 2005, p. iv)

In Example 29, the title of the standard was written in an italic font, whereas it was not conveyed in the same way to the TT. According to the rules of IR 3, which sets rules for the structure and drafting of standards, the title of a standard should be written in the italic font when it is mentioned in the text (IR 3, 2015, p. 27). With this font rule, it is aimed to reach a consensus along all standards developing institutions on indicating titles with an italic font and to use a common font type in titles in order to help the reader to identify titles of standards. However, in Example 16 the reader was not likely to identify the title of the standard. This difficulty arose from the absence of the italic font in the title. Although the title started after the statement “ISO 11904” in the ST, the reader may think that it starts with the statement “ISO 11904” in the TT.

The Local-formatting error presented in Example 29 was defined as minor, because although the font type of the TT might mislead the reader, it was likely to create a

temporary difficulty to the reader in understanding the correct meaning rather than a permanent peculiarity in understanding the text.

As for major Local-formatting errors, the data analysis revealed that there were 8 major Local-formatting errors in C1, which is equal to 1.4% out of the total number of errors. Example 30 illustrates a major Local-formatting error found in C1.

Example 30

Major error

SOURCE TEXT	**TARGET TEXT**
3.1 acquisition repetition interval (EN 13036-8, 2008, p. 5)	3.1 Tekrarlı veri toplama aralığı (TS EN 13036-8, 2009, p. 5)

In Example 30, the text alignment in the TT was not matched with the ST. The excerpt above was taken from Terms and Definition clause of related standards, under which terms were defined. According to standards preparation guide, for the terms defined under the title of Terms and Definition, the start of lines shall be given after numbers of clauses. Each terminological entry shall be given an entry number, and shall be written in start line in order to help to indicate the term defined (IR 3, 2015, p. 60-63). Therefore, the absence of indentation in the TT was classified under Local-formatting error type.

The Local-formatting error presented in Example 30 was defined as major, because the absence of the indentation is likely to mislead the reader in understanding the definition of the term. It was an error that "impacts usability or understandability of the content but which does not render it unusable" (Lommel et al., 2015b).

As for critical Local-formatting error type, no critical errors were detected in C1.

3.1.4.3. Graphics and Tables Errors

Graphics and Tables errors refer to translation errors related to the formatting of graphics and tables in the TT. If graphics and tables of the ST were not conveyed completely and accurately to the TT in terms of their position and/or captions, then such instances were defined as an error related to graphics and tables.

The data analysis revealed that there were 10 errors related to the translation of Graphics and Tables, which is equal to 1.8% out of the total number of errors. Among the translation errors related to Graphics and Tables, 8 instances were defined as minor, which is equal to 1.5% out of the total number of errors. Example 31 illustrates a minor Graphics and Tables error found in C1.

Example 31

Minor error

SOURCE TEXT	**TARGET TEXT**
EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG (EN 12311-2, 2013, p. 1)	AVRUPA STANDARDİZASYON KOMİTESİ EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG (TS EN 12311-2, 2015, p. 1)

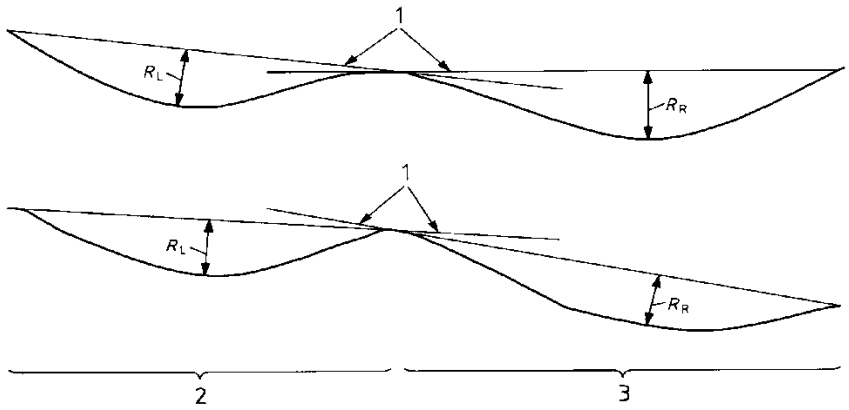
In Example 31, the printing quality of the “Cen Logo” in the TT was not matched both with the ST and with the original logo of the Cen institute which was identical to what was presented in the ST. The TT also, did not provide the font type of the caption below the logo in the ST. This instance was classified under the error type related to the graphics and tables for not providing compatibility of the logo quality and caption font features of the ST.

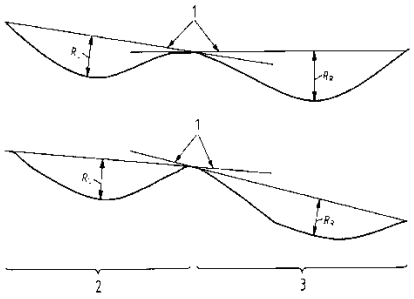
The error presented in Example 31 was defined as minor because, it did not impact the meaning but created difficulty in reading to the reader.

As for major errors related to Graphics and Tables, the data analysis revealed that there were 2 errors defined as major, which is equal to 0.3% out of the total number of errors. Example 32 illustrates a major Graphics and Tables error found in C1.

Example 32

Major error

SOURCE TEXT
Figure A.1 — Transverse profile of a pavement surface showing some irregularities    (EN 13036-8, 2008, p. 17)

TARGET TEXT
Şekil A.1 – Bazı düzlükten sapmaları gösteren kaplama yüzeyi enine profili    (TS EN 13036-8, 2009, p. 15)

In Example 32, “Figure A.11” was a graphic of a test depicting how irregularities could be detected in the pavement surfaces. The print quality of “Figure A.1” in the ST was good enough to read, whereas the print quality of *“Şekil A.1” [Figure A.1]* in the TT was not good enough for the reader who was expected to apply the test depicted in the related figure. The graphic should have been conveyed in a clearer way to the TT.

The Graphics and Tables errors presented in Example 32 was defined as major because it was likely to impact the usability and understandability of the graphic in the related standard but it was an error that “does not render the text unusable” (Lommel et al., 2015b).

As for critical Graphics and Tables errors, none of them were detected in C1.

To finalize, 32 instances of translation errors have been illustrated by randomly chosen from the total 544 translation errors which were observed in C1. These examples were categorized according to MQM translation quality assessment model’s core error categories and defined in terms of their error weighting. An example is given for each error weighting of any error category in this section. The next section presents the analysis of Corpus 2.

3.2. ANALYSIS OF TRANSLATION QUALITY ASSESSMENT OF CORPUS 2

This section presents analysis of translation quality of corpus 2 (C2) consisting of ten randomly chosen standards that were translated from English into Turkish after the year of 2016. In analysis, 81634 words were examined, translation errors were identified and classified according to their error types. The data analysis revealed that there were 314 incorrect instances of translation, which is equal to 0.38% of all lexical items revised. A detailed data analysis is presented in Appendix 1.

Table 5 below presents the summary of error types, their weightings (minor, major, critical) and their quantity found in C2.

Table 5. Summary of Translation Errors Found in C2

Error types	**Minor errors**	**Major errors**	**Critical errors**	**Total**
Accuracy: Mistranslation	0	36	5	**41**
Accuracy: Omission	5	19	1	**25**
Accuracy: Addition	26	19	0	**45**
Accuracy: Untranslated	0	0	0	**0**
Accuracy: Terminology	0	0	0	**0**
Fluency: Ambiguity	0	10	0	**10**
Fluency: Inconsistency	5	33	0	**38**
Fluency: Spelling	1	2	0	**3**
Fluency: Style Guide	7	35	0	**42**
Fluency: Typography	31	3	0	**34**
Fluency: Grammar	2	9	0	**11**
Fluency: Locale Conv.	0	0	0	**0**
Verity: Legal Requirements	0	0	0	**0**
Verity: Locale-S. Content	0	0	0	**0**
Design: Layout	0	3	0	**3**
Design: Local Formatting	55	4	0	**59**
Design: Graphics & Tables	1	2	0	**3**
Total	**133**	**175**	**6**	**314**

As it is evident from Table 5, among the 314 total instances of translation errors, 41 instances were defined as Mistranslation errors, 25 as Omission errors, 45 as Addition errors, 10 as Ambiguity errors, 38 as Inconsistency errors, 3 as Spelling errors, 42 as Style Guide errors, 34 as Typography errors, 11 as Grammar errors, 3 as Layout errors, 59 as Local Formatting errors, 3 as Graphics and Tables errors. The data analysis revealed that there were no translation errors in the categories of Untranslation errors, Terminology errors, Locale Convention errors, Legal Requirements errors and Locale-specific Convention errors in C2.

Each type of the detected translation errors is discussed separately below. All the errors related to a certain error type were classified according to the degree of severity as minor, major and critical.

3.2.1. Accuracy

The errors in translation accuracy refer to instances where the target text (the TT) does not accurately reflect the source text (the ST) such as unnecessary changes in intended meaning, addition and omission of content, and mistranslations. The category of accuracy comprises several error types such as Mistranslation errors, Omission errors, Addition errors, Untranslation errors and Terminology errors, all of which will be addressed separately.

3.2.1.1. Mistranslation Errors

Mistranslation errors occur when the content of the TT does not correctly and accurately represent the content of the ST. If the TT reflects problems in conveying some items such as date/time, unit conversions, false friends, numbers, entity names, literal translation and over translation, then mistranslation occurs in that translation (Lommel et al., 2015b).

The data analysis revealed that there were 41 Mistranslation errors in C2, which is equal to 13% out of the total number of errors. Among the Mistranslation errors, no minor Mistranslation errors were detected in C2.

As for major Mistranslation errors, 36 instances were defined as major, which is equal to 11.4% out of the total number of errors. Example 1 illustrates a major Mistranslation error found in C2.

Example 1

Major error

SOURCE TEXT	**TARGET TEXT**
The suffix "i" denotes the indoor side of units and **"o"** the outdoor ones. **L_{Wi}**: sound power level radiated by the indoor side. **L_{Wo}**: sound power level radiated by the outdoor side. (EN 12102, 2013, p. 7)	**İndis "*i*",** cihazın iç mekânda bulunan kısmını, **indis "*o*"** ise dış mekânda bulunan kısmını belirtmektedir. ***L_{wi}***: Cihazın iç mekânda bulunan kısmından yayılan sesin güç seviyesidir. ***L_{wo}***: Cihazın dış mekânda bulunan kısmından yayılan sesin güç seviyesidir. (TS EN 12102, 2013, p. 11)

In Example 1, although the "i" and "o" symbols were clearly stated in the ST as "the suffix i and o", they were translated as *"indis i ve o" [accent i and o]*. While "suffix" means "a morpheme added at the end of a word" (Oxforddictionaries.com), *"indis" [accent]* means *"bir harf üzerine konulan işaret" [a mark on a letter]* (Tdk.gov.tr). Based on its definition, the term "suffix" should have been translated as *"ek"* in TT.

The Mistranslation error presented in Example 1 was defined as major, because it was an error that "impacts usability or understandability of the content but which does not render it unusable" (Lommel et al., 2015b).

As for critical Mistranslation errors, the data analysis revealed that there were 5 instances of critical Mistranslation errors, which is equal to 1.6% out of the total number of errors. Example 2 illustrates a critical Mistranslation error found in C2.

Example 2

Critical error

SOURCE TEXT	TARGET TEXT
Particle size ≥ 2 mm shall be determined by dry sieving in accordance with EN 459–2:2010, 6.1 and particle size < 2 mm by air-jet sieving in accordance with EN 459–2:2010, 6.2. (EN 459-1, 2015, p. 9)	**Büyüklüğü 2 mm'den büyük olan taneler**, EN 459–2:2010, 6.1'e uygun olarak kuru eleme yoluyla ve büyüklüğü 2 mm'den küçük olan taneler, EN 459–2:2010, 6.2'ye uygun olarak hava jeti ile eleme yoluyla tayin edilmelidir. (TS EN 459-1, 2015, p. 11)

In Example 2, the statement of "particle size ≥ 2 mm" in the ST was translated as *"büyüklüğü 2 mm'den büyük olan taneler" [particles greater than 2 mm]* in the TT. The symbol of "≥" in the ST refers to "greater than or equal to something" (Oxforddictionaries.com); however, it was conveyed to the TT as if it refers only to "greater", instead of *"büyüklüğü ≥ 2 mm" olan taneler [particle size ≥ 2 mm]*. In this way, possibility of equality disappeared in the TT. Formulas play important roles for certainty of standards, therefore the mistranslation error presented in Example 2 is likely to lead to dangerous consequences.

The mistranslation error presented in Example 2 was defined as critical, it was likely to lead a critical failing in application of the standard. Regarding this, it is an error that may "render content unfit for use" (Lommel et al., 2015b).

3.2.1.2. Omission Errors

Omission refers to errors that occur when a content of the ST is missing in the TT.

The data analysis revealed that there were 25 Omission errors in C2, which is equal to 7.96% out of the total number of errors. Among the Omission errors, 5 instances were

defined as minor, which is equal to 1.59% out of the total number of errors. Example 3 illustrates a minor Omission error found in C2.

Example 3

Minor error

SOURCE TEXT	TARGET TEXT
English Version Mobile non-sewer-connected toilet cabins - Requirements of services and products relating to the deployment of cabins and sanitary products (EN 16194, 2012, p. 1)	Atık su bağlantısız taşınabilir tuvalet kabinleri - Kabinlerin yerleştirilmesine ilişkin hizmetler ve mamuller ile sıhhi mamullere ait gerekler (TS EN 16194, 2014, p. 1)

In Example 3, the statement "English Version" in the ST was omitted in the TT, which represents to the publication language of the standard. European standards are published only in languages of English, French and German. In case of the adoption of these standards as a European standard, special rules apply for the distribution of the official versions in English, French or German to the CEN/CENELEC members (IR 3, 2015, p. 87), such as Turkey. One of these special rules is to indicate the language version in the standard which is published by translation of the original text. Therefore, the statement "English Version" should have been translated in the TT as *"Türkçe Sürümü" [Turkish Version]* in order to indicate the publication language before the title of the standard EN 16194.

The Omission error presented in Example 3 was defined as minor because it did not change the main meaning of the context. It was an error that "does not impact usability or understandability of the content" (Lommel et al., 2015b).

As for major Omission errors, the data analysis revealed that there were 19 instances of them, which is equal to 6% out of the total number of errors. Example 4 illustrates a major Omission error found in C2.

Example 4

Major error

SOURCE TEXT	**TARGET TEXT**
6 Description, designation and classification of **aggregate** concrete masonry units (EN 771-3+A1, 2015, p. 15)	6 Beton kâgir birimlerin tarifi, kısa gösterilişi ve sınıflandırılması (EN 771-3+A1, 2015, p. 13)

In Example 4, the term "aggregate" in the ST was omitted in the TT. The term "Aggregate" means "a whole formed by combining several separate elements" (Oxforddictionaries.com). Type of the material was defined with this term in the ST; however, the target reader was not likely to know the type of the material in the TT.

The Omission error presented in Example 4 was defined as major, because the TT failed to convey the type of the material as "aggregate" to the reader, and impacted understandability of the content.

As for critical Omission errors, the data analysis revealed that there was one critical Omission error, which is equal to 0.32% out of the total number of errors. Example 5 illustrates the critical Omission error found in C2

Example 5

Critical error

SOURCE TEXT	TARGET TEXT
Measured values and results The report shall give the following information: - overall A-weighted sound power level (resolution **1/10th** dB), (EN 12102, 2013, p. 21)	Ölçülen değerler ve sonuçlar Rapor aşağıdaki bilgileri içermelidir: Toplam A ağırlıklı ses gücü seviyesi (1/10 dB çözünürlükte), (TS EN 12102, 2013, p. 20)

In Example 5, the superscript of “th” which was used with the number of “10” in the ST was omitted in the TT. The decibel or dB is commonly used in acoustics to quantify sound levels relative to a reference (Allen, 2010, pp. 108-112). Since the related standard deals with the determination of the sound power level, the superscript “th” was playing an important role in the measurement of noise power. Since the human ear does not respond equally to all frequencies, phrases such as A-weighted and “th” are important to indicate that they have been weighted and/or to determine their sound power (ibid.). Therefore, with the absence of the superscript “th” a reader might infer from the TT meaning of both “noise resolution should be 1/10 dB” and “it should be 1/10th dB”.

The Omission error presented in Example 5 was defined as critical, because due to ambiguity in the TT which was likely to be created by the omission of the superscript “th”. This error might lead to a critical failing in application of the standard.

3.2.1.3. Addition Errors

Addition errors refer to items such as words, punctuation marks, numbers, graphics and tables, etc. that were inserted to the TT, though those items did not present in the ST.

The data analysis revealed that there were 45 addition errors in C2, which is equal to 14% out of the total number of errors. Among the Omission errors, 26 instances were defined as minor, which is equal to 8% out of the total number of errors. Example 6 demonstrates a minor Addition error observed in C2.

Example 6

Minor error

SOURCE TEXT	**TARGET TEXT**
CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom. (EN 16272-3-2, 2014, p. 1)	CEN üyeleri **sırasıyla**, Almanya, Avusturya, Belçika, Birleşik Krallık, Bulgaristan, Çek Cumhuriyeti, Danimarka, Estonya, Finlandiya, Fransa, Hırvatistan, Hollanda, İrlanda, İspanya, İsveç, İsviçre, İtalya, İzlanda, Kıbrıs, Letonya, Litvanya, Lüksemburg, Macaristan, Makedonya, Malta, Norveç, Polonya, Portekiz, Romanya, Slovakya, Slovenya, Türkiye ve Yunanistan'ın milli standard kuruluşlarıdır. (TS EN 16272-3-2, 2014, p. 1)

In Example 6, the word *"sırasıyla" [respectively]* was added in the TT, though it did not present in the ST. The translators might deliberately have added the statement into the translation because of that the state names were listed in alphabetical order. However, the word *"sırasıyla" [respectively]* are likely to be interpreted as if the order refers a fact such as membership date, the significance of states etc.

The Addition error presented in Example 6 was defined as minor, for being an error that just created a difficulty in reading but that "does not impact usability of the content" (Lommel et al., 2015b).

As for major Addition errors, the data analysis revealed that there were 19 of them, which is equals to 6% out of the total number of errors. Example 7 illustrates a major Addition error found in C2.

Example 7

Major error

SOURCE TEXT	**TARGET TEXT**
This European Standard was approved by CEN on 5 June 2015. (EN 13310, 2015, p. 1)	Bu Avrupa Standardı CEN tarafından 05 Haziran 2015 **Cuma** tarihinde onaylanmıştır. (TS EN 13310, 2015, p. 1)

In example 7, the word *"Cuma" [Friday]* was added in the TT, though it was not present in the ST. According to IR 3 guide, the date of approval shall be indicated by the year or, for documents which have more than one edition, shall be the year of publication and the month (IR 3, 2015, p. 41). However, in this example the date of approval was indicated by the year, the month and the day, instead of the year and the month.

The Addition error presented in Example 7 was defined as major because it was violating the requirements of the guide and it was an error that affects the standardized style of the standard.

As for critical addition errors, no critical Addition errors were detected in C2.

3.2.1.4. Untranslation Errors

Untranslation errors refer to content "that should have been translated but was left untranslated" (Lommel et al., 2015b).

The data analysis revealed that no Untranslation errors were detected in C2.

3.2.1.5. Terminology Errors

Errors in terminology occur when the TT did not meet the requirement of expected and/or related stereotyped terminology.

The data analysis revealed that no Terminology errors were detected in C2.

3.2.2. Fluency

Fluency refers to the quality of a text in terms of being linguistically well-formed and understandable. The category of Fluency comprises the following error types, all of which will be addressed separately: Ambiguity errors, Inconsistency errors, Spelling errors, Style Guide errors, Typography errors, Grammar errors and Locale Convention errors.

3.2.2.1. Ambiguity Errors

Ambiguity errors refer to instances that occur when a word, a phrase or a sentence in a text has an ambiguous or equivocal meaning in itself. In technical texts, especially in standards, rules and vocabulary are specifically designed to reduce ambiguity to the minimum because of the nature of technical text needs intelligibility. Therefore, if there is an ambiguity in a ST, it should not be transferred into the TT; on the other hand, if there is an ambiguity in the TT, that ambiguity is likely to be a translation error.

The data analysis revealed that there were 10 Ambiguity errors in C2, which is equal to 3.18% out of the total number of errors. Among the Ambiguity errors, neither minor nor critical errors were observed, but there were 8 instances that were defined as major, which is equal to 3.18% out of the total number of errors. Example 8 illustrates a major Ambiguity error found in C2.

Example 8

Major error

SOURCE TEXT	**TARGET TEXT**
CEN members are the national standards bodies of Austria, Belgium, Bulgaria, **Cyprus**, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom. (EN 14304, 2015, p. 1)	CEN üyeleri sırasıyla, Almanya, Avusturya, Belçika, Birleşik Krallık, Bulgaristan, Çek Cumhuriyeti, Danimarka, Estonya, Finlandiya, Fransa, Hollanda, İrlanda, İspanya, İsveç, İsviçre, İtalya, İzlanda, **Kıbrıs**, Letonya, Litvanya, Lüksemburg, Macaristan, Malta, Norveç, Polonya, Portekiz, Romanya, Slovakya, Slovenya ve Yunanistan'ın millî standard kuruluşlarıdır. (TS EN 14304, 2016, p. 1)

In Example 8, the state "Cyprus" in the ST was translated into Turkish as *"Kıbrıs"* which is the correct equivalent of the word in Turkish; however, Cyprus Island comprises two states. One is *Greek Cypriot Administration of Southern Cyprus* and the other is *Turkish Republic of Northern Cyprus*, which is not a recognizable state for the UN (mfa.gov.tr). Although the intended meaning of "Cyprus" referred to the Greek Cyprus State for being a member of CEN institute in the ST, the word *"Kıbrıs"* might evoke Turkish reader to the Turkish Cyprus State for being the local autonomy of Turkey in the TT. For that reason, the translation of the state as *"Kıbrıs"* might cause an ambiguity in target culture. It could have been translated with a clarification such as *"Kıbrıs (Güney Kıbrıs Rum Cumhuriyeti)" [Cyprus (Greek Cypriot)]*, which would reduce the ambiguity in the target language.

The Ambiguity error presented in Example 8 was defined as major, because it was an error that "impacts usability or understandability of the content but which does not render it unusable" (Lommel et al., 2015b).

Only one type of Ambiguity error was observed in C1 and C2.

3.2.2.2. Inconsistency Errors

Errors related to inconsistency occur in texts that are marked with inconsistency in translation of some features such as abbreviations, data, discourse or terminology.

The data analysis revealed that there were 38 instances of Inconsistency errors in C2, which is equal to 12.1% out of the total number of errors. Among the Inconsistency errors, 5 instances were defined as minor, which is equal to 1.6% out of the total number of errors. Example 9 demonstrates a minor Inconsistency error found in C2.

Example 9

Minor error

SOURCE TEXT	**TARGET TEXT**
Dimensions **in metres** (EN 12102, 2013, p. 17)	Ölçüler **m'dir** (EN 12102, 2013, p. 16) Ölçüler **metre'dir** (p. 21)

In Example 9, the statement "dimensions in metres" was translated inconsistently as both *"ölçüler m'dir" [dimensions in m]* and *"ölçüler metre'dir" [dimensions in metres]*. This instance can be classified under "inconsistency in abbreviations".

The Inconsistency error presented in Example 9 was defined as minor, because the reader may infer the intended meaning from both of the translations since they indicate the same thing but in different forms. Therefore, the inconsistency presented above does not impact the meaning but creates a difficulty in reading to the reader.

As for major Inconsistency errors, the data analysis revealed that there were 33 instances of them, which is equal to 10.5% out of the total number of errors. Example 10 illustrates a major Inconsistency error found in C2.

Example 10

Major error

SOURCE TEXT	**TARGET TEXT**
(30 ± 1) **s** (EN 13310, 2015, p. 11)	(30 ± 1) **s** (EN 13310, 2015, p. 10) (30 ± 1) **saniye** (p. 11)

In Example 10, the units of time were inconsistently translated. They were translated from place to place in accordance with the rule of "units of measures shall be translated in accordance with international abbreviations, i.e. min, h, s" (IR 3, 2015, p. 33) and place to place in accordance with their Turkish equivalents, i.e. *dakika [min]*, *saniye [seconds]*. The units of time in the ST should have been conveyed as their English representations and should have been consistently conveyed to the TT. The multiple translations of units were likely to influence the readability and applicability of the translation.

The Inconsistency error presented in Example 10 was defined as major, because it was an error that "impacts usability or understandability of the content but which does not render it completely unusable" (Lommel et al., 2015b).

As for critical Inconsistency errors, none of them were detected in C2.

3.2.2.3. Spelling Errors

Spelling error refers to errors related to a wrong orthography and spelling of a word. For detecting error type, both a comparative analysis between the ST and the TT; and a descriptive analysis of the TT were conducted. Spelling errors comprise capitalization and diacritics errors.

The data analysis revealed that there were 3 Spelling errors in C2, which is equal to 0.9% out of the total number of errors. Among the Spelling errors, 1 instance was defined as minor, which is equal to 0.3% out of the total number of errors. Example 11 illustrates the minor Spelling error found in C2.

Example 11

Minor error

SOURCE TEXT	TARGET TEXT
If a bend cannot be avoided, only one soft bend without guide vanes is permissible in **each** duct. (EN 12102, 2013, p. 11)	Dirsek kullanılması zorunlu ise, **herbir** kanalda, yönlendirme kanadı kullanılmayan yumuşak dönüşlü tek bir dirseğe müsaade edilir. (TS EN 12102, 2013, p. 11)

In Example 11, the word "each" in the ST was translated as *"herbir" [in the meaning of each, but misspelled]* in the TT, which was written as a compound word, though it is not a compound word (Tdk.gov.tr).

The Spelling error presented in Example 11 was defined as minor because, the reader is likely to understand the meaning of the word notwithstanding the incorrect spelling, and the error does not change the meaning of the word but creates a difficulty in reading.

As for major Spelling errors, the data analysis revealed that there were 2 instances of them, which is equal to 0.6% out of the total number of errors. Example 12 illustrates a major Spelling error observed in C2.

Example 12

Major error

SOURCE TEXT	TARGET TEXT
This European Standard **exists** in three official versions (English, French, German). (EN 13310, 2015, p. 1)	Bu standart, üç resmî dilde (İngilizce, Fransızca, Almanca) **yayılanmıştır.** (TS EN 13310, 2015, p. 1)

In Example 12, the predicate of the sentence "exists" was translated as *"yayılanmıştır" [in the meaning of exist, but misspelled]*. Misspelling of the verb as *"yayılanmıştır"*,

instead of *"yayı**m**lanmıştır"* is likely to lead an ambiguity because in the Turkish language there are two words which is likely to confuse which are *"yayınlanmak" [to be broadcasted]* and *"yayımlanmak" [to be published]*. The reader of the TT is likely to get confused when she/he reads the word as *"yayılanmak"*, because it is misspelled and indefinite.

The Spelling error presented in Example 12 was defined as major, because this error is likely to "impact usability or understandability of the content but which does not render it completely unusable" (Lommel et al., 2015b).

As for critical Spelling errors, none of them were observed in C2.

3.2.2.4. Style Guide Errors

Style Guide errors occur in translations when there are violations of the style defined in a normative specification given by a company, institution or organization etc. to be used in the translation process.

The data analysis revealed that there were 42 Style Guide errors in C2, which is equal to 13.3% out of the total number of errors. Among the Style Guide errors, 7 instances were defined as minor, which is equal to 2.2% out of the total number of errors. Example 13 illustrates a minor Style Guide error found in C2.

Example 13

Minor error

SOURCE TEXT	**TARGET TEXT**
Supersedes EN 771-3:2011 (EN 771-3+A1, 2015, p. 1)	EN 771-3:2011'in **yerini alır** (TS EN 771-3+A1, 2015, p. 1)

In Example 13, the statement "supersedes EN 771-3:2011" in the ST indicates that the standard whose number is written after that statement should be withdrawn. Thus, it states that the present standard is in the place of the other. This statement was translated

in a literal translation strategy, however according to the Turkish Standards Preparation Guide (2016), this statement shall be translated as "*EN 771-3:2011 yerine"* rather than *"EN 771-3:2011'in yerini alır"* (p. 45).

The Style Guide error presented in Example 13 was defined as minor because the reader is likely to understand the intended meaning since it does not impact the understandability of the text.

As for major Style Guide errors, the data analysis revealed that there were 35 instances of them, which is equal to 11.1% out of the total number of errors. Example 14 illustrates a major Style Guide error found in C2.

Example 14

Major error

SOURCE TEXT	**TARGET TEXT**
2 Normative references (EN 771-2+A1, 2015, p. 5)	2 Atıf yapılan standard ve/veya dokümanlar (TS EN 771-2+A1, 2015, p. 5)

In Example 14, the statement in the ST was a title of a clause under which referenced documents listed. In this Normative References clause, list of documents is shown in order to indicate the relationship of the document to other documents, and these documents are binding to give references. The title "Normative References" was translated as *"Atıf yapılan standard ve/veya dokümanlar" [referenced standards and/or documents]* however, according to the Turkish Standards Preparation Guide "Normative References "shall be translated as *"Bağlayıcı Atıflar" [normative references]*. On the basis of this rule, the instance presented in Example 14 was classified under the Style Guide error category.

The Style Guide error presented in Example 14 was defined as major, because it was an error that "impacts usability or understandability of the content". The error can affect the understandability because the reader is not likely to infer that these references are

binding to use. It would be inferred from *"Bağlayıcı Atıflar" [normative]* instead of *"Atıf yapılan dökümanlar" [referenced documents]* however, the error does not render the text completely unusable" (Lommel et al., 2015b).

As for critical Style Guide errors, none of them were observed in C2.

3.2.2.5. Typography Errors

Typography errors refer to peculiarities observed in the mechanical presentation of a text such as incorrect usage of punctuations, missing blanks between lines and/or words, or unpaired quote marks.

The data analysis revealed that there were 34 instances of Typography errors in C2, which is equal to 10.8% out of the total number of errors. Among the Typography errors, 31 instances were defined as minor, which is equal to 9.9% out of the total number of errors. Example 15 illustrates a minor Typography error found in C2.

Example 15

Minor error

SOURCE TEXT	**TARGET TEXT**
The sound power level after correction corresponds to the sound power level travelling into the duct: the **"induct"** sound power level, LWd. (EN 12102, 2013, p. 12)	Düzeltilmiş ses gücü seviyesi, kanal içerisine doğru hareket eden ses gücü seviyesine karşılık gelir: **"kanal-içi** ses gücü seviyesi, LWd. (TS EN 12102, 2013, p. 12)

In Example 15, the term "induct" was written in quotation marks whereas its translation *"kanal-içi"* was not in quotation marks. The closing quotation mark was missing in the TT. This error can be classified under the subcategory of unpaired quotation mark of Typography error type.

The Typography error presented in Example 15 was defined as minor because, although there was a missing the closing quotation mark, there was an opening quotation mark. Thus the term could be identified and the error did not impact understandability of the TT.

As for major Typography errors, the data analysis revealed that there were 3 instances of them, which is equal to 0.9% out of the total number of errors. Example 16 illustrates a major Typography error found in C2.

Example 16

Major error

SOURCE TEXT	**TARGET TEXT**
The addition of an Annex ZA relating to the Commission Regulation (EC) no 206/2012 (EN 12102, 2013, p. 4)	Avrupa Komisyonu'nun (EC)206/2012.numaralı Yönetmeliği ile ilgili bir Ek ZA ilavesi (TS EN 12102, 2013, p. 4)

In Example 16, there was a full stop after title of the regulation as **"(EC)206/2012."** in the TT, though it was not present in the ST. This full stop was likely to mislead the reader, because the reader would infer that the full stop had been deliberately used in the title of the regulation.

The Typography error presented in Example 16 was defined as major, because it was an error that has the possibility of "impacting usability or understandability of the content" (Lommel et al., 2015b).

As for critical Typography errors, none of them were observed in C2.

3.2.2.6. Grammar Errors

Chomsky (1965) defines grammar as "a system of rules that in some explicit and well-defined way assigns structural descriptions to the sentences" (p. 8). Every language has

its own system as Chomsky defines. Translators should pay attention to the rules of those systems in the process of translation. When they fail, grammar related errors occur in the text or translation. In MQM context, errors related to grammar refer to "peculiarities in respect to grammar or syntax of the text, other than spelling and orthography" (Lommel et al., 2015b).

The data analysis revealed that there were 11 Grammar errors in C2, which is equal to 3.5% out of the total number of errors. Among the Grammar errors, 2 instances were defined as minor, which is equal to 0.6% out of the total number of errors. Example 17 illustrates a minor Grammar error found in C2.

Example 17

Minor error

SOURCE TEXT	**TARGET TEXT**
Key (EN 771-2+A1, 2015, p. 26)	Açıklama**lar** (EN 771-2+A1, 2015, p. 25)

In Example 17, the word "key" was singular in the ST whereas the translation of the word *"açıklamalar" [keys]* was plural in the TT. The pluralization of the word in translation was classified under Grammar error type.

The Grammar error presented in Example 17 was defined as minor because there was only one item under the "key" title, thus the reader was likely to comprehend the content regardless of the plurality of the title. Therefore, this instance was an error that "did not impact usability or understandability of the content" (Lommel et al., 2015b).

As for major Grammar errors, the data analysis revealed that there were 9 instances of them, which is equal to 2.9% out of the total number of errors. Example 18 illustrates a major Grammar error found in C2.

Example 18

Major error

SOURCE TEXT	**TARGET TEXT**
The results of the determination of the product type **shall be documented** in test reports. (EN 16034, 2014, p. 4)	Ürün tipinin belirlenmesinin sonuçları deney raporlarında **belgelenir.** (TS EN 16034, 2014, p. 4)

In Example 18, the verb "document" in the ST was used with the modal "shall" which conveys necessity. However, it was translated as *"belgelenir" [is documented]* in the TT, which does not convey necessity or obligation. The IR 3 guide, which sets rules of standard texts states that structures of necessity are important to be translated as the same structure to another language in order to conform to the document and from which no deviation is permitted (pp. 75-78). This would avoid any confusion between the requirements of a document and external statutory obligations. In this example, the translation of the modal "shall" as a verb which does not carry the meaning of necessity was likely to lead the reader to confusion and possible misinterpretation of the context.

The Grammar error presented in Example 18 was defined as major, because of creating confusion due to the wrong translation of the modal.

As for critical Grammar errors, none of them were observed in C2.

3.2.2.7. Locale Convention Errors

Locale convention errors refer to errors that do not adhere to locale-specific mechanical customs and violates requirements for the presentation of content in the target locale (Lommel et al., 2015b).

The data analysis revealed that no Locale Convention errors were observed in C2.

3.2.3. Verity

Verity refers to text appropriation for the target audience in MQM context. Verity errors involve elements of the translation which pertain to the relevancy of the translation to the target audience. The category of verity comprises two error types: the first is Legal Requirement errors and the second is Locale-specific Content errors, each of them will be addressed separately.

3.2.3.1. Legal Requirement Errors

Legal requirement errors refer to instances where a text does not meet legal requirements as set forth in the specification, i.e. infringement of rules of publishing or list of prohibited articles.

The data analysis revealed that no translation errors related to the infringement of a legal requirement were observed in C2.

3.2.3.2. Locale-Specific Content Errors

Errors related to locale-specific content refer to instances that occur where “a content specific to the source locale does not apply to the intended target locale, audience, or purpose” (Lommel et al., 2015b).

The data analysis revealed that no translation errors related to Locale Specific Content were observed in C2.

3.2.4. Design

Design related errors refer to “issues related to the physical presentation of the text”, in here the TT (Lommel et al., 2015b). The category of design comprises several error types such as Layout errors, Local-formatting errors and Graphics and Tables errors, all of which will be addressed separately.

3.2.4.1. Layout Errors

Items of the TT such as color, global font choice, footnotes/endnotes, headers/footers, margins, page breaks etc., which were not translated in accordance with the layout design of the ST were defined under layout error type in the present study.

The data analysis revealed that there were 3 instances of Layout defined as erroneous in C2, which is equal to 0.95% out of the total number of errors. Among the Layout errors, neither minor nor critical errors were observed, but there were 3 instances of major Layout errors, which is equal to 0.95% out of the total number of errors. Example 19 illustrates a major Layout error found in C2.

Example 19

Major error

SOURCE TEXT	**TARGET TEXT**
Contents […] 4 Air lime 4.1 General 4.2 Sub-families of air lime 4.3 Forms of air lime 4.4 Calcium lime 4.5 Dolomitic lime (EN 549-1, 2015, p. 2)	Contents […] 4 Havada sertleşen kireç 4.1 Genel 4.2 Havada sertleşen kirecin alt grupları **4.2.2 Dolomitik kireç (DL)** 4.3 Havada sertleşen kirecin biçimleri **4.3.1 Sönmemiş kireç (Q)** 4.4 Kalsiyum kireci **4.4.1 Kalsiyum kireçlerinin sınıflandırılması** (TS EN 549-1, 2015, p. 2)

In Example 19, the excerpts above were taken from “Table of Contents” pages of the ST and the TT. The titles in the ST did not match with the TT because subtitles were given in the TT, though they did not present in the ST. According to IR 3 guide, a sub-clause shall not be created in the table of contents page unless there is at least one further sub-

clause at the same level. For example, text in Clause 10 shall not be written as “10.1” in the table of contents page unless there is also a sub-clause “10.2” (IR 3, 2015, p. 19). Accordingly, although the subtitles of clauses present in the text of the standards, they shall not be presented in the table of contents. Therefore, it is clear that the ST complied with this rule, however the TT did not. This error was defined as Layout error because it arose from the way of the text arranged.

The Layout error presented in Example 19 was defined as major, because it was violating the requirements of the guide and it was an error that impacts the standardized style of the standard.

3.2.4.2. Local-Formatting Errors

The errors are categorized under this error category when they failed to meet expectations of the target reader and the text type criteria related to format such as text alignment, paragraph indentation, bold/italic, font, kerning, leading.

The data analysis revealed that there were 59 Local-formatting errors in C2, which is equal to 18.7% out of the total number of errors. Among them 55 instances were defined as minor, which is equal to 17.5% of the total number of errors. Example 20 illustrates a minor Local-formatting error found in C2.

Example 20

Minor error

SOURCE TEXT	**TARGET TEXT**
Sanitary appliances - Wash basins - Functional requirements and test methods (EN 14688, 2015, p. 1)	**Sağlık Gereçleri - Lavabolar - İşlevsel gereklilikler ve deney yöntemleri** (TS EN 14688, 2015, p. 1)

In Example 20, the title of the standard was written in a bold font in the TT, whereas it was not written in bold in the ST. According to the rules of IR 3, which sets internal rules of developing standards, CEN-CENELEC members shall use the same rules for

presentation in content and layout when preparing the translated text of the European Standard in their language (IR 3, 2015, p. 89). With this rule on presentation of a translated standard, it is aimed to reach a consensus along all standards developing institutions in order to have a common presentation. The unnecessary bold font type in the TT was defined as a Local-formatting error because it was indicated otherwise in the guide.

The Local-formatting error presented in Example 20 was defined as minor, because although the font type of the TT was not presented with the same presentation rule of the ST, it was not likely to create a difficulty to the reader in understanding the text.

As for major Local-formatting errors, the data analysis revealed that there were 4 major Local-formatting errors in C2, which is equal to 1.2% out of the total number of errors. Example 21 illustrates a major Local-formatting error found in C2.

Example 21

Major error

SOURCE TEXT	**TARGET TEXT**
3.1 masonry unit (EN 771-2+A1, 2015, p. 6)	3.1 Kâgir birim (TS EN 771-2+A1, 2015, p. 6)

In Example 21, the text alignment in the TT was not matched with the ST. The excerpt above was taken from Terms and Definition clause of related standards, under which terms were defined. According to standards preparation guide, for the terms defined under the title of Terms and Definition, the start of lines shall be given after numbers of clauses. Each terminological entry shall be given an entry number, and shall be written in start line in order to help to indicate the term defined (IR 3, 2015, p. 60-63). Therefore, the absence of indentation in the TT was classified under Local-formatting error type.

The Local-formatting error presented in Example 21 was defined as major because the absence of the indentation is likely to mislead the reader into understanding the definition of the term. It is an error that "impacts usability or understandability of the content but which does not render it unusable" (Lommel et al., 2015b).

Only one type of major Local-formatting error was observed in C1 and C2.

As for critical Local-formatting errors, none of them were detected in C2.

3.2.4.3. Graphics and Tables Errors

Graphics and Tables errors refer to translation errors related to the formatting of graphics and tables in the TT. If graphics and tables of the ST were not conveyed completely and accurately to the TT in terms of their position and/or captions, then such instances were defined as an error related to graphics and tables.

The data analysis revealed that, there were 3 errors related to the translation of Graphics and Tables, which is equal to 0.9% out of the total number of errors. Among Graphics and Tables errors, 1 instance was defined as minor, which is equal to 0.3% out of the total number of errors. Example 22 illustrates the minor Graphics and Tables error found in C2.

Example 22

Minor error

SOURCE TEXT	TARGET TEXT
 EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG (EN 12102, 2013, p. 1)	 AVRUPA STANDARDİZASYON KOMİTESİ EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG (TS EN 12102, 2013, p. 1)

In Example 22, the printing quality of the “Cen Logo” in the TT was not matched both with the ST and with the original logo of the Cen institute which was identical to what was presented in the ST. The TT also, did not provide the font type of the caption below the logo in the ST. This instance was classified under the error type related to the graphics and tables for not providing compatibility of the logo quality and caption font features of the ST.

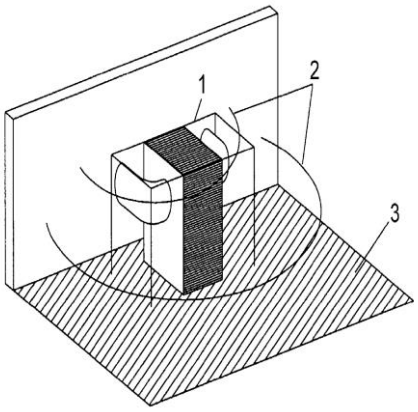
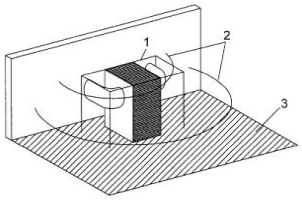
The Graphics and Tables error presented in Example 22 was defined as minor because it did not affect the meaning but created a difficulty in reading to the reader.

Only one type of minor Graphics and Tables error was observed in C1 and C2.

As for major Graphics and Tables errors, the data analysis revealed that there were 2 instances of them, which is equal to 0.6% out of the total number of errors. Example 23 exemplifies a major Graphics and Tables error found in C2.

Example 23

Major error

SOURCE TEXT	**TARGET TEXT**
Figure 4 — Measurement of L_W using the free field over a reflecting plane method  (EN 12102, 2013, p. 19)	Şekil 4 - Bir yansıtıcı düzlem üzerindeki serbest alan yönteminin kullanıldığı L_w, ölçümü  (TS EN 12102, 2013, p. 19)

In Example 23, "Figure 4" was a graphic of a test which illustrates how the free field over a reflecting plane can be measured. The print quality of "Figure 4" in the ST was good enough to read, whereas the print quality of *"Şekil 4" [Figure 4]* in the TT was not good enough for the reader who was expected to apply the test depicted in the related figure. The graphic should have been conveyed in a clearer way to the TT.

The Graphics and Tables error presented in Example 23 was defined as major because it was likely to impact the usability and understandability of the graphic in the related standard but it was an error that "does not render the text unusable" (Lommel et al., 2015b).

As for critical Graphics and Tables error, none of them were detected in C2.

To finalize, 23 instances of translation errors have been illustrated randomly chosing from the total 314 translation errors which were observed in C2. These examples were categorized according to MQM translation quality assessment model's core error categories and defined in terms of their error weighting. An example is given for each

error weighting of any error category in this section. The next section presents comparison of the translation quality analysis of C1 and C2.

3.3. COMPARISON OF ANALYSIS OF TRANSLATION QUALITY ASSESSMENTS OF CORPUS 1 AND CORPUS 2

This part of Chapter 3 presents a comparative analysis of the results of translation quality analysis of C1 and C2 in order to determine whether there was any improvement in translation quality of C2 after the introduction of commission in the year of 2016.

We search for inferential conclusions based on the collected data by means of a quantitative analysis. Specifically, this section presents the tests which are used to determine whether the error means of two corpora are statistically different from each other or not. To this end, firstly, the equality of the total number of the errors in C1 and C2 will be tested. Secondly, equality of the error weightings in C1 and C2 will be tested. Thirdly, improvement level after the innovation will be determined. Lastly, uniformity of core error categories will be tested. Finally, results of each test will be reached and discussed separately. All the conclusions reached in this section are based on Statistical Hypothesis Testing procedure.

3.3.1. Hypothesis Tests

Hypothesis testing, also known as p-value testing, aims at a decision on whether or not a hypothesis is supported by the sample (Taeger & Kuhnt, 2014, p. 3). It is usually impossible to prove a hypothesis, hence, it is tested a null hypothesis (H_0) which includes all possibilities i.e. no equality in results and equality in results (ibid.). If the P-value is less than or equal to α, then the null hypothesis is rejected in favor of expected hypothesis and it can be said that data provides sufficient evidence to conclude the hypothesis of the study.

In Hypothesis test, distributions of variables need to be calculated. The Poisson probability law gives the probability distribution of the number of events occurring in a specified interval of time or space and it is characterized by a single parameter which is

the mean number of occurrences during the specified interval (Gu et al., 2008). For instance, a random variable X is said to have a binomial distribution if X is the number of successes when an event with a fixed probability of success p is tried n times independently. If p approaches zero and n goes to infinity but $\lambda = n * p$ is constant, theoretically, this binomial random variable is said to approach to Poisson random variable in distribution.

In the present study, the total number of errors observed in N words. For example, in corpus 1, it is observed the number of errors in 38685 words. Since at each word, the probability of making an error is a very small number and the total number of words is a large number, we can safely assume that the number of errors follows a Poisson distribution. Therefore, hypothesis tests related to the number of errors will be performed based on Poisson distributions.

There are mainly three research hypotheses in this study and each of them is tested using appropriate statistical tests in the following subsections.

3.3.1.1. Testing the Equality of Total Number of Errors in C1 and C2

It is desired to see whether the average number of errors after the innovation is reduced. In other words, if the innovation were successful, it is expected to observe fewer errors in C2.

Two random variables are defined as follows:

$X_1: Number\ of\ errors\ in\ C1$

$X_2: Number\ of\ errors\ in\ C2$

As the theoretical reasons explained before, both errors assumed to have the following Poisson distributions:

$X_1 \sim Poisson(\lambda_1)$

$X_2 \sim Poisson(\lambda_2)$

Using this terminology, the research question becomes to be whether λ_2 is less than λ_1, or equivalently, whether $\lambda_1$less than λ_2. The formal test is given as follows. The significance level of the test is taken to be 1%. In other words, the maximum risk of concluding improvement even if there is no improvement but the data reflects an improvement by chance is controlled at a level of 1%.

$$H_0: \frac{\lambda_1}{\lambda_2} = 1 \ (No\ significant\ improvement\ after\ innovation\ in\ C2)$$

$$H_A: \frac{\lambda_1}{\lambda_2} > 1 \ (The\ improvement\ after\ innovation\ is\ significant\ in\ C2)$$

$$\alpha = 0.01$$

The test statistics W is defined as follows (Gu et al., 2008).

$$W = \frac{X_1 - X_2/d}{\sqrt{X_1 + X_2/(d^2)}}$$

W follows an approximate standard normal distribution, and p-value of the test will be calculated using standard normal distribution. The null hypothesis will be rejected if p-value of the test is less than significance level. If Z follows a standard normal distribution, p-value is given by the following formula:

$$p - value = P(Z > W_{calc})$$

Using the data obtained from the data analysis of the present study, the calculated value of the test statistics W is shown in the following part of the excel worksheet:

Table 6. Results of the Test Showing Comparison of the Total Number of Errors of C1 and C2

Test 1:	**Comparison of the total error numbers of two corpora**			
d = N2/N1 =	2,110223601			
	C1	**C2**		
Words revised =	38685	81634		
Total errors found =	544	314		
W_calc=	15,94233239			
p-value =	0,0000			

Since p-value is 0.0000 and less than the significance level 0.01, the null hypothesis is rejected. Data provides sufficient evidence to conclude that innovation significantly improves translation quality at 1% significance level.

3.3.1.1.1. Determining Improvement Level of Translation Quality

In order to have a more concrete result, the ratio of errors is desired to be tested. In other words, the research question of this part is: "What is the maximum error rate multiplier that can be statistically concluded?" For example, if the error rate multiplier is 2.5, then the errors before innovation is 2.5 times that of after innovation. The maximum value of this value illustrated as 2.5 is desired to be found.

In order to determine the maximum value of error rate multiplier, the hypothesis test is re-designed as follows, letting the value to be ρ.

$X_1 \sim Poisson(\lambda_1)$

$X_2 \sim Poisson(\lambda_2)$

$H_0: \frac{\lambda_1}{\lambda_2} = \rho$ $(No\ significant\ improvement\ after\ innovation)$

$H_A: \frac{\lambda_1}{\lambda_2} > \rho$ $(The\ improvement\ after\ innovation\ is\ significant)$

$\alpha = 0.01$

$$W = \frac{X_1 - X_2 * \rho/d}{\sqrt{X_1 + X_2 * (\frac{\rho}{d})^2}}$$

The point of ρ which changes the result of the test at 1% level is found by trial and error. Increasing values of ρ are tested and when $\rho = 3.1$ is taken, the null hypothesis is still rejected. However, when $\rho = 3.2$ is taken, the conclusion of the test appears to be as "Do not reject H0".

The calculations are as follows:

$\rho = 3.1$

Table 7. Results of the Test Showing the Improvement Level of Translation Quality When p is Taken 3.1

Test 2:	**Determining the level of improvement**		
d = N2/N1 =	2,110223601		
test rho =	3,1		
estimated rho =	3,66		
	C1	**C2**	
Words revised =	38685	81634	
Total errors found =	544	314	
Estimated Lambda =	1,41%	0,38%	
W_calc=	2,366734441		
p-value =	0,0090		

Since p-value is 0.0090 and less than the significance level 0.01, the null hypothesis is rejected. Data does not provide sufficient evidence to conclude that innovation reduces the error rate by more than 3.1 times of the previous.

$\rho = 3.2$

Table 8. Results of the Test Showing the Improvement Level of Translation Quality When p is Taken 3.2

Test 2:	**Determining the level of improvement**		
d = N2/N1 =	2,110223601		
test rho =	3,2		
estimated rho =	3,66		
	C1	**C2**	
Words revised =	38685	81634	
Total errors found =	544	314	
Estimated Lambda =	1,41%	0,38%	
W_calc=	1,906651074		
p-value =	0,0283		

Since p-value is 0.0283 and more than the significance level 0.01, the null hypothesis is not rejected. Data does not provide sufficient evidence to conclude that innovation reduces the error rate by more than 3.2 times of the previous.

3.3.1.2. Testing the Equality of Error Weightings in C1 and C2

The testing procedure is applied to each of error weighting categories, which are minor, major and critical. The data analysis revealed following statistics:

Table 9. Summary of Translation Errors in Terms of Their Weightings

	Minor	**Major**	**Critical**
C1	297	238	9
C2	133	175	6

Each of error weighting tests is shown as follows:

3.3.1.2.1. Test of Minor Errors

Minor errors assumed to have the following Poisson distributions:

$X_{1,mi} \sim Poisson(\lambda_{1,mi})$

$X_{2,mi} \sim Poisson(\lambda_{2,mi})$

$H_0: \frac{\lambda_{1,mi}}{\lambda_{2mi}} = 1\ (No\ significant\ improvement\ in\ minor\ errors\ in\ C2)$

$H_A: \frac{\lambda_{1,mi}}{\lambda_{2,mi}} > 1\ (The\ improvement\ in\ minor\ errors\ in\ C2\ is\ significant)$

$\alpha = 0.01$

$$W_{mi} = \frac{X_{1,mi} - X_{2,mi}/d}{\sqrt{X_{1,mi} + X_{2,mi}/(d^2)}}$$

Decision criteria: Reject H0 if p-value < 0.01.

Calculation of p-value is given as follows:

Table 10. Results of the Test Showing Comparison of Total Number of Minor Errors in C1 and C2

Test 3:	**Comparison of total minor errors of two corpora**		
d = N2/N1 =	2,110223601		
	C1	**C2**	
Words revised =	38685	81634	
Minor errors found =	297	133	
W_calc=	12,9413922		
p-value =	0,0000		

Since p-value is 0.0000 and less than the significance level 0.01, the null hypothesis is rejected. Data provides sufficient evidence to conclude that innovation significantly improves translation quality in terms of minor errors at 1% significance level.

3.3.1.2.2. Test of Major Errors

Major errors assumed to have the following Poisson distributions:

$X_{1,ma} \sim Poisson(\lambda_{1,ma})$

$X_{2,ma} \sim Poisson(\lambda_{2,ma})$

$H_0: \frac{\lambda_{1,ma}}{\lambda_{2,ma}} = 1$ $(No\ significant\ improvement\ in\ minor\ errors\ in\ C2)$

$H_A: \frac{\lambda_{1,ma}}{\lambda_{2,ma}} > 1$ $(The\ improvement\ in\ minor\ errors\ in\ C2\ is\ significant)$

$\alpha = 0.01$

$$W_{ma} = \frac{X_{1,ma} - X_{2,ma}/d}{\sqrt{X_{1,ma} + X_{2,ma}/(d^2)}}$$

Decision criteria: Reject H0 if p-value < 0.01.

Calculation of p-value is given as follows:

Table 11. Results of the Test Showing Comparison of Total Number of Major Errors in C1 and C2

Test 3:	**Comparison of total major errors of two corpora**		
d = N2/N1 =	2,110223601		
	C1	**C2**	
Words revised =	38685	81634	
Major errors found =	238	175	
W_calc=	9,312253348		
p-value =	0,0000		

Since p-value is 0.0000 and less than the significance level 0.01, the null hypothesis is rejected. Data provides sufficient evidence to conclude that innovation significantly improves translation quality in terms of major errors at 1% significance level.

3.3.1.2.3. Test of Critical Errors

Critical errors assumed to have the following Poisson distributions:

$X_{1,cr} \sim Poisson(\lambda_{1,cr})$

$X_{2,cr} \sim Poisson(\lambda_{2,cr})$

$H_0: \frac{\lambda_{1,cr}}{\lambda_{2,cr}} = 1$ $(No\ significant\ improvement\ in\ minor\ errors\ in\ C2)$

$H_A: \frac{\lambda_{1,cr}}{\lambda_{2,cr}} > 1$ $(The\ improvement\ in\ minor\ errors\ in\ C2\ is\ significant)$

$\alpha = 0.01$

$$W_{cr} = \frac{X_{1,cr} - X_{2,cr}/d}{\sqrt{X_{1,cr} + X_{2,cr}/(d^2)}}$$

Decision criteria: Reject H0 if p-value < 0.01.

Calculation of p-value is given as follows:

Table 12. Results of the Test Showing Comparison of Total Number of Critical Errors in C1 and C2

Test 3:	**Comparison of total critical errors of two corpora**		
d = N2/N1 =	2,1102236		
	C1	**C2**	
Words revised =	38685	81634	
Critical errors found =	9	6	
W_calc=	1,91395833		
p-value =	0,0278		

Since p-value is 0.0278 and more than the significance level 0.01, the null hypothesis is not rejected. Data does not provide sufficient evidence to conclude that innovation significantly improves translation quality in terms of critical errors at 1% significance level.

3.3.1.3. Testing the Equality of Core Error Categories

This section seeks to analyze translation error distributions of core error categories according to error patterns. Namely, it is desired to test whether all error categories are distributed uniformly. This test will be performed separately for each corpus. The core error category of verity is excluded from the data since this category had very low frequencies. Table 13 below presents the core error categories of C1 and C2 and their error quantities.

Table 13. Summary of Translation Errors of Core Categories

Core Error Category	C1	C2
Accuracy	48,598	13,597
Fluency	44,979	16,905
Design	46,271	7,962
Total	139,847	38,464

3.3.1.3.1. Uniformity of Errors over Core Error Categories in C1

It is desired to see whether the average number of errors change with respect to core error category level before the innovation. The following random variables are defined for the corresponding test:

$X_{Ac,C1}$: $Number\ of\ Accuray\ errors\ in\ C1$

$X_{Fl,C1}$: $Number\ of\ Fluency\ errors\ in\ C1$

$X_{De,C1}$: $Number\ of\ Design\ errors\ in\ C1$

As the theoretical reasons explained before, all the core errors assumed to have the following Poisson distributions:

$X_{Ac,C1} \sim Poisson(\lambda_1)$

$X_{Fl,C1} \sim Poisson(\lambda_2)$

$X_{De,C1} \sim Poisson(\lambda_3)$

Using this terminology, the research question becomes to be whether all the λ_i values are equal to each other or at least one λ_i value is different from the others . The formal test is given as follows. The significance level of the test is taken to be 1%.

$H_0: \lambda_1 = \lambda_2 = \lambda_3$ $(No\ significant\ differnce\ between\ core\ categories)$

H_A: $At\ least\ one\ core\ category\ have\ a\ diffent\ mean\ rate$

$\alpha = 0.01$

Chiu and Wang (2009) suggests that "a homogeneity test for several Poisson means and this testing procedure is suitable for the purposes of this study since the research question here necessitates a comparison of more than two Poisson means" (p. 4).

The test statistics V is defined as follow: (Chiu & Wang 2009)

$$V = \frac{\sum N_i}{\sum X_i} \times \sum \frac{{X_i}^2}{N_i} - \sum X_i$$

V follows an approximate chi square distribution, with degrees of freedom k-1, where k is the number of categories which is 3. Hence, p-value of the test will be calculated using chi square distribution with 2 degrees of freedom and null hypothesis will be rejected if p-value of the test is less than significance level:

$p - value = P(V > V_{calc})$

Using the data obtained from the data analysis of the present study, Table 14 below presents the calculated value of the test statistics V.

Table 14. Results of the Test Showing Uniformity of the Number of Errors in Core Categories of C1

Test 4:	**Comparison of core error categories in C1**	
Core Error Category	**X**	**X^2/N**
Accuracy	48,598	0,0611
Fluency	44,979	0,0523
Design	46,271	0,0553
Total	139,847	0,169
N	38685	
	Total Ni/Total Xi	829,8683
	Total (Xi^2/Ni) =	0,168692
	V =	0,1443
	p_value =	0,930391

Since p-value is 0.931 and much more than the significance level 0.01, the null hypothesis is not rejected. Data does not provide sufficient evidence to conclude that the core error categories before innovation have different mean rates. Hence, the conclusion is that all errors distribute uniformly over categories.

3.3.1.3.2. Uniformity of Core Error Categories in C2

It is desired to see whether the average number of errors change with respect to core error category level before the innovation. The following random variables are defined for the corresponding test:

$X_{Ac,C2}$: $Number\ of\ Accuray\ errors\ in\ C2$

$X_{Fl,C2}$: $Number\ of\ Fluency\ errors\ in\ C2$

$X_{De,C2}$: $Number\ of\ Design\ errors\ in\ C2$

As the theoretical reasons explained before, all the core errors assumed to have the following Poisson distributions:

$X_{Ac,C2} \sim Poisson(\lambda_1)$

$X_{Fl,C2} \sim Poisson(\lambda_2)$

$X_{De,C2} \sim Poisson(\lambda_3)$

Using this terminology, the research question becomes to be whether all the λ_i values are equal to each other or at least one λ_i value is different from the others. The formal test is given as follows. The significance level of the test is taken to be 1%.

$H_0: \lambda_1 = \lambda_2 = \lambda_3$ $(No\ significant\ differnce\ between\ core\ categories)$

$H_A: At\ least\ one\ core\ category\ have\ a\ diffent\ mean\ rate$

$\alpha = 0.01$

$$V = \frac{\sum N_i}{\sum X_i} \times \sum \frac{{X_i}^2}{N_i} - \sum X_i$$

$$p - value = P(V > V_{calc})$$

Using the data obtained from the data analysis of the present study, Table 15 below presents the calculated value of the test statistics V.

Table 15. Results of the Test Showing Heterogeneity of the Number of Errors in Core Categories of C2

Test 4:	**Comparison of core error categories in C2**	
Core Error Category	**C2**	**X^2/N**
Accuracy	13,597	0,0048
Fluency	16,905	0,0074
Design	7,962	0,0016
Total	38,464	0,014
N	81634	
	Total Ni/Total Xi	6366,984
	Total (Xi^2/Ni) =	0,013805
	V =	49,43323
	p_value =	0,0000

Since p-value is 0.0000 and less than the significance level 0.01, the null hypothesis is rejected. Data provides sufficient evidence to conclude that the core error categories after innovation have different mean rates. Hence, the conclusion is that the errors do not distribute uniformly over categories.

To sum up, the results derived from the statistical tests revealed that firstly, the data provide sufficient evidence to conclude that introduction of the commission has significantly improved translation quality, secondly, the data provide sufficient evidence to conclude that the commission has significantly reduced the error mean of C2 by more than 3.1 times of C1, thirdly, the data provide sufficient evidence to conclude that introduction of the commission has significantly improved translation quality in terms of minor and major errors, finally the data provide sufficient evidence to conclude that translation errors distributed uniformly over core error categories in C1 whereas errors did not distribute uniformly over core error categories in C2.

3.4. DISCUSSION

The purpose of the present study was to examine whether the presence of translation commission would contribute to the quality of the translation. For this purpose, we compared the quality of translation of 10 randomly chosen standards translated from English into Turkish before the year of 2016 with 10 randomly chosen standards translated from English into Turkish after the year of 2016, when the translation commission was introduced to the TSE.

To this end, the study aimed to answer the following research questions:

1. To what extent are the translations of standards before the year 2016 compatible with the function of informative texts and peculiarities of standards?
2. To what extent are the translations of standards after the year 2016 compatible with the function of informative texts and peculiarities of standards?
3. Is there a significant difference between the translation quality of standards translated before the year of 2016 and after the year of 2016?

Concerning the first research question, the quantitative and qualitative data analysis revealed that there were 544 incorrect instances of translation out of the 38.685 lexical items revised in C1, which is equal to 1.4% of all the lexical items revised. Among the 544 total instances of translation errors, there were 188 errors related to the category of Accuracy (53 instances were defined as Mistranslations, 67 as Omissions, 54 as Additions, 1 as Untranslation and 13 as Terminology errors), 166 errors related to the category of Fluency (8 as Ambiguity errors, 41 as Inconsistency errors, 8 as Spelling errors, 64 as Style Guide errors, 16 as Typography errors, 36 as Grammar errors, 1 as Locale Convention errors), 179 errors related to Design (14 as Layout errors, 155 as Local Formatting errors, and 10 as Graphics and Tables errors) and 3 errors related to the category of Verity (3 as Locale-specific Content errors). Among of all the detected errors, 9 belonged to critical, 238 to major, 297 to minor errors.

The qualitative data analysis showed that although the most frequent category was Accuracy among the three core error categories, statistically all the translation errors were distributed uniformly.

The recorded results suggest that translation errors vary by any error type ranging from Mistranslation to Grammar or format related error types. Apparently this indicates that the translations of standards before the year 2016 were not compatible with the function of informative texts and peculiarities of standards, since informative texts need to be written and translated in concise and clear sentences without ambiguity, which suggests that the translation quality of C1 requires improvement via the use of more accurate sentences and more compatible format arrangements in the translation of the standards.

As for the second research question, the quantitative data analysis revealed that there were 314 incorrect instances of translation in C2, which is equal to 0.38% of all the 81.634 lexical items revised. Among the 314 total instances of translation errors, there were 111 errors related to the category of Accuracy (41 Mistranslations, 25 Omissions, 45 Additions), 138 errors related to the category of Fluency (10 Ambiguity errors, 38 Inconsistency errors, 3 Spelling errors, 42 Style Guide errors, 34 Typography errors, 11 Grammar errors), 65 errors related to the category of design (3 Layout errors, 59 Local Formatting errors, 3 Graphics and Tables errors). The data analysis revealed that there were no translation errors in the category of Verity in C2. Among of all the detected errors, 6 belonged to critical, 175 to major, 133 to minor errors.

If to compare the error rates in C1 with those of C2, although the number of errors of all categories decreased to some extends in C2, there were still 314 incorrect instances of translation. The qualitative data analysis showed that Fluency was the most frequent core error category, which comprises such errors as Ambiguity, Inconsistency, Spelling, Style Guide, Typography, Grammar and Locale Convention. Taking into consideration the informative function of standards, translators are supposed to provide accurate and precise translations, however, the available errors related to the category of Fluency in C2, initially ambiguity, inconsistency, spelling and grammar, hinder the quality of the translation, and mislead the users and result in an incorrect utilization of standards. For this reason, it seems possible to suggest that the translations of standards after the year 2016 were not completely compatible with the function of informative texts.

However, there was significant decrease in the number of translation errors related to the category of Design, to be more precise, the number of errors in this category

decreased at the highest level. This may suggest that the translations of standards before the year 2016 were compatible with peculiarities of standards.

Concerning the third research question, the data analysis of the translation quality of construction standards before and after the year of 2016 revealed that there was a significant difference between the quality of standards translated before and after the introduction of the commission.

The statistical data analysis revealed that introduction of the commission significantly reduced error rates of C2 by more than 3.1 times if compared with C1 and thus improved translation quality, as well as changed the distribution of error patterns, with errors distributed uniformly over the core error categories in C1, but with the category of Fluency as predominant in C2.

Overall, the study provides a piece of evidence that the presence of commission is likely to enhance the quality of translation and supports the view of Vermeer that a translator should be provided with a properly defined commission before starting the process of translation. Vermeer (2004) defines a commission as "the instruction, given by oneself or by someone else, to carry out a given action" and asserts that commissions are rarely given in details with respect to the ultimate purpose of the text (p. 235). However, Vermeer stresses that a commission should not be limited to the instruction to translate the following text but comprise, firstly, the purpose of translation and, secondly, conditions under which the translation needs to be conducted, such as needs of reader, design, style, deadline, fee, etc.

Vermeer (2004) asserts that "the presence of a commission facilitates the form of the TT as well as translation quality in general" (p. 236), which was supported by our findings. In terms of Skopos theory, "the realizability of a commission depends on the circumstances of the target culture, not on those of the source culture" (ibid). Consistently with this assumption, after the year of 2016 TSE provided the commission defining the purpose of translation, translation requirements for informative texts, expectations of the target reader and terminology to be used, as well as the needs of the target culture and requirements for a standard design in detail. The main difference of the guide dated 2016 from others that had been used is its "realizability" which depends

on the requirements and context of the target culture, not on those of the source culture. Thus, former guides of TSE were literal translations of IR 3 Guide which sets the rules of translation for European countries whereas the one published in 2016 provided the translators mainly with instructions for Turkish readers and cultures. According to the guide (2016) the difference was stated as follows:

> Although this Guide prepared in accordance with the CEN/CENELEC Rules (IR 3 Guide), it contains important innovations related to form and content which are prepared for target audience, i.e. writing rules of the Turkish Language Association (TDK) Writing Guide is adopted as much as possible. (TSE, 2016, p. 6, my translation)

As it is defined in the Guide of TSE (2016), translators were mainly provided with instructions on the design of standards. Not surprisingly, the results of translation quality analysis of C2 demonstrated that the main decrease in errors was recorded in the category of Design. However, the errors related to the category of Fluency (Ambiguity, Inconsistency, Spelling, Style Guide, Typography, Grammar and Locale Convention) still take place in the translations after the year of 2016. A possible reason for the continuation of errors in these categories may be related to the nature of commission being limited to the lack of information about the function and peculiarities of the informative text type. Since informative texts need to be written and translated in concise and clear sentences, it can be suggested that TSE should further explain and elaborate on translation requirements of the informative text type, which may allow translators to produce more accurate translations of standards.

What is more, the data analysis of C2 revealed that although the Guide provides comprehensive instructions about consistent terminology and elements related to the numbering of clauses, there were still inconsistencies on these elements in the translations after the year of 2016. These errors may have resulted from the possibility that translators used translations done during the preceding years as an example. In this respect, translators should be advised by TSE to conduct translation process by strictly following the instructions of the Guide (2016) rather than consulting parallel texts, which were translated before the introduction of the commission. It can be also suggested that the translators should be trained in all the aspects of translating standards.

CONCLUSION

To conclude, the present study provided evidence that the presence of commission has an effect on the quality of translation and contributes to the fulfillment of translation requirement. The study supports the view of Vermeer that a translator should be provided with a properly defined commission before starting the process of translation.

The study is based on the comparison of quality of standard in the field of construction translated before and after the introduction of the commission. As a suggestion for future research, a similar study can be conducted in different fields of standard translation, as well as it can be expanded to different text types or different language pairs.

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APPENDIX 1

DETAILED DATA ANALYSIS OF C1 AND C2

MQM Quality Assurance Form

File Name:	TS_EN_12311-2 in C1			
QA Date:	9.06.2017			
Words Reviewed:	**2415**			
Reviewer's Name:				
QA Result:	**(Poor D)**	**Index Score:**	**4,5**	
Error Category	**Minor Errors**	**Major Errors**	**Critical Errors**	**Error Points Calculated**
Accuracy: Mistranslation	2	1	0	3
Accuracy: Omission	1	3	1	5
Accuracy: Addition	3	0	0	3
Accuracy: Untranslated	0	0	0	0
Accuracy: Terminology	0	0	0	0
Design: Layout	0	0	0	0
Design: Local formatting	6	0	0	6
Design: Graph. and Tab.	2	0	0	2
Fluency: Ambiguity	0	1	0	1
Fluency: Inconsistency	2	2	0	4
Fluency: Spelling	0	0	0	0
Fluency: Style guide	4	5	0	9
Fluency: Typography	1	0	0	1
Fluency: Grammer	2	1	0	3
Fluency: Local Conv.	1	0	0	1
Verity: Legal req.	0	0	0	0
Verity: Locale-specific content	0	2	0	2
Total	24	**15**	**1**	**40**

Summary feedback:

The quality of translation could be improved with more accurate and fluent translation.

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This field allows you to subjectively improve or decrease the overall mark calculated. To improve the mark, please enter either 0.5 or 1. To decrease the mark, please enter either -0.5 or -1 in the field below.

0

Error Severity	
Minor	1
Major	5
Critical	10

Page / Segment ID	Source Text	Target text	Replaced with	Type of Error	Severity	Reviewer's Comment
1	EN 12311-2	absent	TS EN 12311-2	Accuracy: Omission	Major	the title of the standard has been omitted in the TT
1	May 2013	absent	May 2013	Accuracy: Omission	Major	the date of the standard has been omitted in the TT
1	English Version	absent	Türkçe sürümü	Accuracy: Omission	Minor	the name of the version is omitted in the TT
1	Flexible sheets for waterproofing - Determination of tensile properties - Part 2: Plastic and rubber sheets for roof waterproofing	**Su yalıtımı için esnek levhalar - Çekme özelliklerinin tayini - Bölüm 2: Çatılarda su yalıtımı için kullanılan plastik ve kauçuk levhalar**	Su yalıtımı için esnek levhalar - Çekme özelliklerinin tayini - Bölüm 2: Çatılarda su yalıtımı için kullanılan plastik ve kauçuk levhalar	Design: Local formatting	Minor	The title of the standard is not bold in the ST but written in bold in the TT
1	CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.	CEN üyeleri **sırasıyla**, Almanya, Avusturya, Belçika, Birleşik Krallık, Bulgaristan, Çek Cumhuriyeti, Danimarka, Estonya, Finlandiya, Fransa, Hırvatistan, Hollanda, İrlanda, İspanya, İsveç, İsviçre, İtalya, İzlanda, Kıbrıs, Letonya, Litvanya, Lüksemburg, Macaristan, Makedonya, Malta, Norveç, Polonya, Portekiz, Romanya, Slovakya, Slovenya, Türkiye ve Yunanistan'ın milli standard kuruluşlarıdır.	CEN üyeleri Almanya, Avusturya, Belçika, Birleşik Krallık, Bulgaristan, Çek Cumhuriyeti, Danimarka, Estonya, Finlandiya, Fransa, Hırvatistan, Hollanda, İrlanda, İspanya, İsveç, İsviçre, İtalya, İzlanda, Kıbrıs, Letonya, Litvanya, Lüksemburg, Macaristan, Makedonya, Malta, Norveç, Polonya, Portekiz, Romanya, Slovakya, Slovenya, Türkiye ve Yunanistan'ın milli standard kuruluşlarıdır.	Accuracy: Addition	Minor	the word "sırasıyla" which means "respectively" in English has been added in the TT
1	CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.	CEN üyeleri sırasıyla, Almanya, Avusturya, Belçika, Birleşik Krallık, Bulgaristan, Çek Cumhuriyeti, Danimarka, Estonya, Finlandiya, Fransa, Hollanda, İrlanda, İspanya, İsveç, İsviçre, İtalya, İzlanda, Kıbrıs, Letonya, Litvanya, Lüksemburg, Macaristan, Malta, Norveç, Polonya, Portekiz, Romanya, Slovakya, Slovenya ve Yunanistan'ın millî standard kuruluşlarıdır.	CEN üyeleri sırasıyla, Almanya, Avusturya, Belçika, Birleşik Krallık, Bulgaristan, Çek Cumhuriyeti, Danimarka, Estonya, Finlandiya, Fransa, Hollanda, İrlanda, İspanya, İsveç, İsviçre, İtalya, İzlanda, Kıbrıs (Güney Kıbrıs Rum Yönetimi), Letonya, Litvanya, Lüksemburg, Macaristan, Malta, Norveç, Polonya, Portekiz, Romanya, Slovakya, Slovenya ve Yunanistan'ın millî standard kuruluşlarıdır.	Fluency: Ambiguity	Major	The state "Cyprus" in the TT has been translated as "Kıbrıs" which is the correct equivalent of the word in Turkish; however, Cyprus island comprises two states. One is Greek Cypriot Administration of Southern Cyprus and the other is Turkish Republic of Northern Cyprus which is not a recognable state for the UN. The word "Kıbrıs" may evoke Turkish reader to the northern side, or it may cause an ambiguity. Therefore, a clarification is needed for the Turkish reader.
1	"Cen" logo and its name			Design: Graph. and Tab.	Minor	the logo and its name are placed in the right side of the page instead of the middle
1	the type size of the title page is 9	the type size of the title page is 12	the type size of the TT should be 9 as the ST	Fluency: Inconsistency	Minor	the font size of the TT is bigger than the ST
2	Normative references	atıf yapılan standard ve/veya dokümanlar	bağlayıcı atıflar	Fluency: Style guide	Major	"normative references" shall be translated as "bağlayıcı atıflar" according to the Turkish Standards Preparation Guide
2	Terms and definitions	Terimler ve tarifleri	Terimler ve tanımlar	Fluency: Style guide	Major	"terms and definitions" shall be translated as "terimler ve tanımlar" according to the Turkish Standards Preparation Guide
2	Sampling	Numune alımı	Numune alma	Fluency: Style guide	Minor	"sampling" shall be translated as "numune alma" according to the Turkish Standards Preparation Guide
3	This document (EN 12311-2:2013) has been prepared by Technical Committee CEN/TC 254 "Flexible sheets for waterproofing", the secretariat of which is held by NEN.	Bu doküman (EN 12311-2:2013) sekretaryası NEN tarafından yürütülen CEN/TC 254 "*Flexible sheets for waterproofing* - Su yalıtımı için esnek levhalar" Teknik Komitesi tarafından hazırlanmıştır.	Bu doküman (EN 12311-2:2013), sekretaryası NEN tarafından yürütülen CEN/TC 254 "*Flexible sheets for waterproofing* - Su yalıtımı için esnek levhalar" Teknik Komitesi tarafından hazırlanmıştır.	Fluency: Typography	Minor	a comma after the subject "Bu doküman (EN 12311-2:2013)" is necessary to avoid from ambiguity
3	This document has been technically and editorially revised **in order to**: - adjust the separation speed to CEN TC 189 standards; - add precision data of a Round Robin test.	Bu doküman, teknik olarak ve redaksiyonel olarak aşağıda verilen **hususlarda** revize edilmiştir: - Ayırma hızının CEN TC 189 standardlarına göre ayarlanması **için** - Aynı numune kullanılarak laboratuvarlar arası karşılaştırma deneyine ait kesinlik verisinin eklenmesi **için.**	Bu doküman, teknik olarak ve redaksiyonel olarak aşağıdaki **amaçlarla** revize edilmiştir: - Ayırma hızının CEN TC 189 standardlarına göre ayarlanması; - Aynı numune kullanılarak laboratuvarlar arası karşılaştırma deneyine ait kesinlik verisinin eklenmesi.	Fluency: Grammer	Minor	the structure and word order of the TT does not fluently correspond to the ST
3	add precision data of **a Round Robin test**	**Aynı numune kullanılarak laboratuvarlar arası karşılaştırma deneyine** ait kesinlik verisinin eklenmesi için	**Round Robin** deneyine ait kesinlik verilerinin eklenmesi	Verity: Locale-specific content	Major	the statement "Robin round test" in the ST has been translated in a descriptive way in the TT instead of transfering the name of the test directly. This strategy may be preferred in order to familarize the source content to the target reader, however this may mislead the reader.
3	According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard:	CEN/CENELEC İç Yönetmeliklerine göre, bu Avrupa Standardının ulusal standard olarak uygulamaya alınmasından sorumlu ulusal standard kuruluşlarının ülkeleri **sırasıyla**;	CEN/CENELEC İç Yönetmeliklerine göre, bu Avrupa Standardının ulusal standard olarak uygulamaya alınmasından sorumlu ulusal standard kuruluşlarının ülkeleri;	Accuracy: Addition	Minor	the word "sırasıyla" which means "respectively" in English has been added in the TT
5	**determinatio**n of the tensile properties of plastic and rubber sheets for roof waterproofing	çatılarda su yalıtımı için kullanılan plastik ve kauçuk levhaların çekme özelliklerinin **belirlenmesi**/çatılarda su yalıtımı için kullanılan plastik ve kauçuk levhaların çekme özelliklerinin **tayini**	çatılarda su yalıtımı için kullanılan plastik ve kauçuk levhaların çekme özelliklerinin **tayini**	Fluency: Inconsistency	Major	multiple translations of a same term
5	Normative references	atıf yapılan standard ve/veya dokümanlar	bağlayıcı atıflar	Fluency: Style guide	Major	"normative references" shall be translated as "bağlayıcı atıflar" according to the Turkish Standards Preparation Guide
5	Terms and definitions	Terimler ve tarifleri	Terimler ve tanımlar	Fluency: Style guide	Major	"terms and definitions" shall be translated as "terimler ve tanımlar" according to the Turkish Standards Preparation Guide
5	NOTE 1 to entry:	**Not 1 -**	NOT	Design: Local formatting	Minor	the word "NOTE" is not bold and it is capitalized, the TT has bold and miniscule

5	EN 1849-2, Flexible sheets for waterproofing — Determination of thickness and mass per unit area — Part 2: Plastic and rubber sheets	EN 1849-2, Flexible sheets for waterproofing - Determination of thickness and mass per unit area - Part 2: Plastic and rubber sheets (Su yalıtımı için esnek levhalar - Kalınlığın ve birim alan kütlesinin tayini - Bölüm 2: Plastik ve lastik levhalar)	EN 1849-2, Flexible sheets for waterproofing — Determination of thickness and mass per unit area — Part 2: Plastic and rubber sheets	Fluency: Style guide	Minor	according to the Turkish Standards Preparation Guide, name of the documents in Normative References article shall not be translated into Turkish, they should be remained in the original language
5	EN 13416, Flexible sheets for waterproofing — Bitumen, plastic and rubber sheets for roof waterproofing — Rules for sampling	EN 13416: 2000, Flexible sheets for waterproofing - Bitumen, plastic and rubber sheets for roof waterproofing - Rules for sampling (Su yalıtımı için esnek levhalar- Çatılarda su yalıtımı için kullanılan bitümlü, plastik ve kauçuk levhalar- Numune alma kuralları)	EN 13416, Flexible sheets for waterproofing — Bitumen, plastic and rubber sheets for roof waterproofing — Rules for sampling	Fluency: Style guide	Minor	according to the Turkish Standards Preparation Guide, name of the documents in Normative References article shall not be translated into Turkish, they should be remained in the original language
5	EN ISO 7500-1, Metallic materials — Verification of static uniaxial testing machines — Part 1: Tension/compression testing machines — Verification and calibration of the force-measuring system (ISO 7500-1)	EN ISO 7500-1, Metallic materials - Verification of static uniaxial testing machines - Part 1: Tension/ compression testing machines (ISO 7500-1) (Metal malzemeler - Tek eksenli statik deney makinalarının doğrulanması - Bölüm 1: Çekme/basma deney makinaları - Kuvvet ölçme sisteminin doğrulanması ve kalibrasyonu)	EN ISO 7500-1, Metallic materials — Verification of static uniaxial testing machines — Part 1: Tension/compression testing machines — Verification and calibration of the force-measuring system (ISO 7500-1)	Fluency: Style guide	Minor	according to the Turkish Standards Preparation Guide, name of the documents in Normative References article shall not be translated into Turkish, they should be remained in the original language
5	The force and elongation is continuously recorded throughout the test, and preferably **with** a permanent record of the maximum tensile force.	Bir deney numunesi, kopana kadar sabit bir hızda çekilerek uzatılır. Kuvvet ve uzama, deney boyunca sürekli olarak kaydedilir. Tercihen en büyük çekme kuvveti **de** kaydedilir.	Bir deney numunesi, kopana kadar sabit bir hızda çekilerek uzatılır. Kuvvet ve uzama, deney boyunca sürekli olarak kaydedilir. Tercihen en büyük çekme kuvveti **ile birlikte** kaydedilir.	Fluency: Grammer	Major	translation of the conjunction "with" in the ST has been conveyed erroneously as if "with" means "also" instead of "ile" which means "with"
6	The tensile testing machine shall have a sufficient loading capacity of at least 2000 N and a grip separation speed of **(5 ± 1, 100 ± 10 and 500 ± 50) mm/min.**	Çekme deney makinası en az 2000 N olmak üzere yeterli çekme kapasitesine sahip olmalı ve çenelerin arasındaki mesafenin açılma hızı **dakikada (5 ± 1) mm, (100 ± 10) mm ve (500 ± 50) mm** olmalıdır.	Çekme deney makinası en az 2000 N olmak üzere yeterli çekme kapasitesine sahip olmalı ve çenelerin arasındaki mesafenin açılma hızı **(5 ± 1, 100 ± 10 ve 500 ± 50) mm/min** olmalıdır.	Fluency: Inconsistency	Minor	the words "milimetre" and "hour" are not abbreviated in the ST but it is abbreviated in the TT; this strategy may mislead the reader
6	The tensile testing machine shall be equipped with grips of a type which maintain or increase the clamping pressure as a function of the increase of the tensile force applied to the test specimen.	Çekme deney makinasının çeneleri, deney numunesine uyguladığı kenetleme (sıkma) basıncını sabit tutabilmeli veya deney numunesine uygulanan çekme kuvvetinin artışına bağlı olarak arttırabilmelidir.	Çekme deney makinası, deney numunesine uygulanan gerilme kuvvetinin artmasının bir fonksiyonu olarak sıkma basıncını muhafaza eden veya arttıran çenelerle donatılmalıdır.	Accuracy: Mistranslation	Major	mistranslation arising from the wrong interpretation of the word order
6	A mark or tape on the test specimen where it enters the grips will help reveal any slip.	Deney numunesi çenelere yerleştirildikten sonra, deney numunesinin üzerine işaretlenecek olan bir çizgi veya yapıştırılacak olan bir bant, herhangi bir sıyrılma olup olmadığının belirlenmesine yardımcı olabilir.	Deney numunesi çenelere yerleştirildikten sonra, deney numunesinin üzerine işaretlenecek olan bir çizgi veya yapıştırılacak olan bir bant, herhangi bir sıyrılma olup olmadığının belirlenmesine yardımcı olacaktır.	Fluency: Grammer	Minor	present tense in the ST has been translated as a possibility modal
6	6 Sampling	6 Numune alınması	6 Numune alma	Fluency: Inconsistency	Major	Multiple translation of a same term. "sampling" translated as "numune alımı" before; however "sampling" shall be translated as "numune alma" according to the Turkish Standards Preparation Guide.
6	The force measuring system shall meet at least Class 2 of EN ISO 7500-1 **(i.e. ± 2 %).**	Kuvvet ölçme sistemi, EN ISO 7500-1 de verilen en az Sınıf 2'yi (diğer bir deyişle **± 2%'yi)** sağlamalıdır.	Kuvvet ölçme sistemi, EN ISO 7500-1 de verilen en az Sınıf 2'yi (diğer bir deyişle ± **%2'yi)** sağlamalıdır.	Fluency: Local Conv.	Minor	the symbol of percentange needs to be written in the left side of the number for target locale.
6	Condition the test specimens, prior to testing, for **at least 20 h** in a standard atmosphere of (23 ± 2) °C and (50 ± 5) % relative humidity.	Deneyden önce deney numuneleri, (23 ± 2) ºC sıcaklık ve % (50 ± 5) bağıl neme sahip standart bir ortamda **en 20 saat** süreyle şartlandırılmalıdır	Deneyden önce deney numuneleri, (23 ± 2) ºC sıcaklık ve % (50 ± 5) bağıl neme sahip standart bir ortamda **en az 20 saat** süreyle şartlandırılmalıdır	Accuracy: Omission	Critical	"at least" in the ST has been translated as "en" instead of "en az". In this issue, "az" has been omitted, this may lead critical failing in application of the standard.
6	Condition the test specimens, prior to testing, for at least **20 h** in a standard atmosphere of (23 ± 2) °C and (50 ± 5) % relative humidity.	Deneyden önce deney numuneleri, (23 ± 2) ºC sıcaklık ve % (50 ± 5) bağıl neme sahip standart bir ortamda en **20 saat** süreyle şartlandırılmalıdır.	Deneyden önce deney numuneleri, (23 ± 2) ºC sıcaklık ve % (50 ± 5) bağıl neme sahip standart bir ortamda en az **20 h** süreyle şartlandırılmalıdır.	Fluency: Style guide	Major	units of measures shall be used in accordance with international abbreviations
7	The test is carried out **on a test specimen** at a temperature of (23 ± 2) °C.	Deney, (23 ± 2) ºC sıcaklıkta gerçekleştirilmelidir.	Test, (23 ± 2) ° C sıcaklıkta **bir deney numunesi üzerinde** gerçekleştirilir.	Accuracy: Omission	Major	"on a test specimen" phrase is omitted in the TT
7	**Figure 1 — Rectangular test specimen for method A and method B**	**Şekil 1 -** Yöntem A ve Yöntem B için dikdörtgen deney numunesi	**Şekil 1 - Yöntem A ve Yöntem B için dikdörtgen deney numunesi**	Design: Local formatting	Minor	The sentence is completely bold in the ST but not in the TT
7	the figure 1	Şekil 1		Design: Graph. and Tab.	Minor	typing features of the instructions of the figure 1 does not match with the ST
8	**Figure 2 — Dumb- bell test specimen for method B**	**Şekil 2 -** Yöntem B için kaşık tipi deney numunesi	**Şekil 2 - Yöntem B için kaşık tipi deney numunesi**	Design: Local formatting	Minor	The sentence is completely bold in the ST but not in the TT
8	**Table 1 — Test specimen data**	**Çizelge 1 -** Deney numunesi verileri	**Çizelge 1 - Deney numunesi verileri**	Design: Local formatting	Minor	The sentence is completely bold in the ST but not in the TT
9	The maximum tensile force and corresponding elongation and the elongation at break are noted, together with the direction of test.	En büyük çekme kuvveti ve buna karşılık gelen uzama, kopma uzaması ve deneyin uygulandığı doğrultu **(numunenin boyuna veya enine doğrultusu)** kaydedilmelidir.	En büyük çekme kuvveti ve buna karşılık gelen uzama, kopma uzaması ve deneyin uygulandığı doğrultu kaydedilmelidir.	Accuracy: Addition	Minor	"(numunenin boyuna veya enine doğrultusu)" has been added to the translation which is unnecessary explanation
9	a Round Robin test	laboratuvarlar arası karşılaştırma	Round Robin deneyi	Verity: Locale-specific content	Major	the statement "Robin round test" in the ST has been translated in a descriptive way in the TT instead of transfering the name of the test directly. This strategy may be preferred in order to familarize the source content to the target reader, however this may mislead the reader.
9	**Table 2 – Round Robin results**	**Çizelge 2 -** Laboratuvarlar arası karşılaştırma verileri	**Çizelge 2 - Laboratuvarlar arası karşılaştırma verileri**	Design: Local formatting	Minor	The sentence is completely bold in the ST but not in the TT
9	a) reference to **this document** (EN 12311-2) and any deviation from it	a) **Bu Avrupa Standardına** (EN 12311-2) atıf ve bu standarddan herhangi bir sapma,	a) **Bu dökümana** (EN 12311-2) atıf ve bu standarddan herhangi bir sapma,	Accuracy: Mistranslation	Minor	"this document" in the ST has been translated with a clarification
9	e) test results in accordance with Clause 9, noting if the distance between the grips has been reduced and noting the separation speed;	e) Madde 9'a göre deney sonuçları; çenelerin arasındaki mesafe azaltıldıysa belirtilmelidir, çenelerin arasındaki mesafenin açılma hızı belirtilmelidir,	e) çeneler arasındaki mesafe azaltıldıysa bu mesafeyi ve açılma hızını belirten, Madde 9'a göre yapılmış deney sonuçları;	Accuracy: Mistranslation	Minor	mistranslation arising from the wrong interpretation of the word order

MQM Quality Assurance Form

File Name:	TS_EN_16272-1 in C2			
QA Date:	9.06.2017			
Words Reviewed:	3561			
Reviewer's Name:				
QA Result:	(Excellent A)	**Index Score:**	0	
Error Category	**Minor Errors**	**Major Errors**	**Critical Errors**	**Error Points Calculated**
Accuracy: Mistranslation	0	3	1	4
Accuracy: Omission	0	11	0	11
Accuracy: Addition	2	0	0	2
Accuracy: Untranslated	0	0	0	0
Accuracy: Terminology	0	0	0	0
Design: Layout	0	1	0	1
Design: Local formatting	13	1	0	14
Design: Graph. and Tab.	0	0	0	0
Fluency: Ambiguity	0	1	0	1
Fluency: Inconsistency	0	0	0	0
Fluency: Spelling	0	1	0	1
Fluency: Style guide	0	2	0	2
Fluency: Typography	0	0	0	0
Fluency: Grammer	1	1	0	2
Fluency: Local Conv.	0	0	0	0
Verity: Legal req.	0	0	0	0
Verity: Locale-specific content	0	0	0	0
Total	16	**21**	**1**	**38**

Summary feedback:
The quality could be improved with more accurate and fluent sentences.

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This field allows you to subjectively improve or decrease the overall mark calculated. To improve the mark, please enter either 0.5 or 1. To decrease the mark, please enter either -0.5 or -1 in the field below.

0

Error Severity	
Minor	1
Major	5
Critical	10

Page / Segment ID	Source Text	Target text	Replaced with	Type of Error	Severity	Reviewer's Comment
1	EN 16272	absent	TS EN 16272	Accuracy: Omission	Major	the title of the standard has been omitted in the TT
1	October 2012	absent	Ekim 2012	Accuracy: Omission	Major	the date of the standard has been omitted in the TT
1	English Version	absent	Türkçe sürümü	Accuracy: Omission	Minor	the name of the version is omitted in the TT

1	Railway applications - Track - Noise barriers and related devices acting on airborne sound propagation - Test method for determining the acoustic performance - Part 1: Intrinsic characteristics - Sound absorption in the laboratory under diffuse sound field conditions	**Demiryolu uygulamaları - Raylar - Gürültü bariyerleri ve hava ile yayılan ses üzerinde etkili olan cihazlar - Akustik performansın tayini için deney yöntemi - Bölüm 1: Temel özellikler - Düzgün yayılan ses alanına sahip, laboratuvar ortamında ses yutma**	Demiryolu uygulamaları - Raylar - Gürültü bariyerleri ve hava ile yayılan ses üzerinde etkili olan cihazlar - Akustik performansın tayini için deney yöntemi - Bölüm 1: Temel özellikler - Düzgün yayılan ses alanına sahip, laboratuvar ortamında ses yutma	Design: Local formatting	Minor	The title of the standard is not bold in the ST but written in bold in the TT
1	A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.	Başka herhangi bir dile tercümesi, CEN üyesinin sorumluluğundadır ve resmi baskıları ile aynı statüde olduğu CEN-CENELEC Yönetim Merkezi'ne bildirilir.	Bir CEN üyesinin sorumluluğunda kendi diline çeviri yoluyla elde edilen ve CEN-CENELEC Yönetim Merkezi'ne bildirilen başka bir dildeki bir sürüm, bu standardın resmi sürümleri ile aynı statüdedir.	Accuracy: Mistranslation	Critical	The sentence has been translated to cause misunderstanding
1	CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.	CEN üyeleri sırasıyla, Almanya, Avusturya, Belçika, Birleşik Krallık, Bulgaristan, Çek Cumhuriyeti, Danimarka, Estonya, Finlandiya, Fransa, Hırvatistan, Hollanda, İrlanda, İspanya, İsveç, İsviçre, İtalya, İzlanda, Kıbrıs, Letonya, Litvanya, Lüksemburg, Macaristan, Makedonya, Malta, Norveç, Polonya, Portekiz, Romanya, Slovakya, Slovenya, Türkiye ve Yunanistan'ın milli standard kuruluşlarıdır.	CEN üyeleri Almanya, Avusturya, Belçika, Birleşik Krallık, Bulgaristan, Çek Cumhuriyeti, Danimarka, Estonya, Finlandiya, Fransa, Hırvatistan, Hollanda, İrlanda, İspanya, İsveç, İsviçre, İtalya, İzlanda, Kıbrıs, Letonya, Litvanya, Lüksemburg, Macaristan, Makedonya, Malta, Norveç, Polonya, Portekiz, Romanya, Slovakya, Slovenya, Türkiye ve Yunanistan'ın milli standard kuruluşlarıdır.	Accuracy: Addition	Minor	the word "sırasıyla" which means "respectively" in English has been added in the TT
1	CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.	CEN üyeleri sırasıyla, Almanya, Avusturya, Belçika, Birleşik Krallık, Bulgaristan, Çek Cumhuriyeti, Danimarka, Estonya, Finlandiya, Fransa, Hollanda, İrlanda, İspanya, İsveç, İsviçre, İtalya, İzlanda, Kıbrıs, Letonya, Litvanya, Lüksemburg, Macaristan, Malta, Norveç, Polonya, Portekiz, Romanya, Slovakya, Slovenya ve Yunanistan'ın millî standard kuruluşlarıdır.	CEN üyeleri sırasıyla, Almanya, Avusturya, Belçika, Birleşik Krallık, Bulgaristan, Çek Cumhuriyeti, Danimarka, Estonya, Finlandiya, Fransa, Hollanda, İrlanda, İspanya, İsveç, İsviçre, İtalya, İzlanda, Kıbrıs (Güney Kıbrıs Rum Yönetimi), Letonya, Litvanya, Lüksemburg, Macaristan, Malta, Norveç, Polonya, Portekiz, Romanya, Slovakya, Slovenya ve Yunanistan'ın millî standard kuruluşlarıdır.	Fluency: Ambiguity	Major	The state "Cyprus" in the TT has been translated as "Kıbrıs" which is the correct equivalent of the word in Turkish; however, Cyprus island comprises two states. One is Greek Cypriot Administration of Southern Cyprus and the other is Turkish Republic of Northern Cyprus which is not a recognable state for the UN. The word "Kıbrıs" may evoke Turkish reader to the northern side, or it may cause an ambiguity. Therefore, a clarification is needed for the Turkish reader.
3	This document (EN 16272-1:2012) has been prepared by Technical Committee CEN/TC 256 "Railway applications", the secretariat of which is held by DIN.	Bu standard (EN 16272-1:2012), sekretaryası DIN tarafından gerçekleştirilen CEN/TC 256 "Railway applications – Demiryolu uygulamaları" Teknik Komitesince hazırlanmıştır	Bu doküman (EN 16272-1:2012), sekretaryası DIN tarafından gerçekleştirilen CEN/TC 256 "Railway applications – Demiryolu uygulamaları" Teknik Komitesince hazırlanmıştır	Accuracy: Mistranslation	P	The word "document" which means "doküman" in Turkish has been translated as "standard" in the TT.
5	This European Standard specifies the laboratory method for measuring the sound absorption of flat noise barriers or flat claddings for retaining walls or tunnels.	Bu standard düz gürültü bariyerlerinin veya düz tünel veya istinat duvarlarının kaplamalarının ses yutmasının ölçülmesinde kullanılacak bir laboratuvar deney yöntemini kapsar.	Bu Avrupa Standardı, düz gürültü bariyerlerinin veya düz tünel veya istinat duvarlarının kaplamalarının ses yutmasının ölçülmesinde kullanılacak bir laboratuvar deney yöntemini kapsar.	Accuracy: Omission	Major	The statement "European" has been omitted in the translation
5	normative references	atıf yapılan standard ve/veya dokümanlar	bağlayıcı atıflar	Fluency: Style guide	Major	"normative references" shall be translated as "bağlayıcı atıflar" according to the Turkish Standards Preparation Guide
5	terms and definitions	Terimler ve tarifleri	Terimler ve tanımlar	Fluency: Style guide	Major	terms and definitions shall be translated as "terimler ve tanımlar" according to the Turkish Standards Preparation Guide
5	The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.	Aşağıdaki atıf dokümanları, bu dokümanın uygulanması için zaruridir. Tarih belirtilen atıflarda, belirtilmiş olan baskı geçerlidir. Tarih belirtilmemiş atıflarda, atıf yapılan dokümanın en son baskısı (tadiller dahil) kullanılır.	Aşağıdaki atıf dokümanlar, bu dokümanın uygulanması için zaruridir. Tarih belirtilen atıflarda, belirtilmiş olan baskı geçerlidir. Tarih belirtilmemiş atıflarda, atıf yapılan dokümanın en son baskısı (tadiller dahil) kullanılır.	Accuracy: Omission	Major	the word "any" which means "tüm" in Turkish, has been omitted in the TT
5	For the purposes of this document, the terms and definitions given in ISO 9346 and the following apply.	Bu standardın amacı bakımından, ISO 9346'da verilenlerle birlikte aşağıda verilen terimler uygulanır	Bu standardın amaçları doğrultusunda, ISO 9346'da verilenlerle birlikte aşağıda verilen terimler ve tanımlar geçerlidir	Accuracy: Mistranslation	Major	It has been chosen another meaning of the word "apply"; it has been translated as "uygulamak" instead of "geçerli".
5	For the purposes of this document, the terms and definitions given in ISO 9346 and the following apply.	Bu standardın amacı bakımından, ISO 9346'da verilenlerle birlikte aşağıda verilen terimler uygulanır	Bu standardın amaçları doğrultusunda, ISO 9346'da verilenlerle birlikte aşağıda verilen terimler ve tanımlar geçerlidir	Fluency: Grammer	Minor	The "purposes" word in the ST is a plural word but it has been written in singular form in the TT.
5	For the purposes of this document, the terms and definitions given in ISO 9346 and the following apply.	Bu standardın amacı bakımından, ISO 9346'da verilenlerle birlikte aşağıda verilen terimler uygulanır	Bu standardın amaçları doğrultusunda, ISO 9346'da verilenlerle birlikte aşağıda verilen terimler ve tanımlar geçerlidir	Accuracy: Omission	Major	The word "definitions" has been omitted in the TT.
5	Note 1 to entry:	**Not 1-**	Kayda ait not 1:	Accuracy: Omission	Major	The statement "to entry" has been omitted in the TT.
5	Note 1 to entry:	**Not 1-**	Kayda ait not 1:	Design: Local formatting	Minor	the phrase "Note 1 to entry" is not bold in the ST; but, it is bold in the TT. The note format of the ST has been changed in translation.
5	Note 1 to entry: Noise barriers are generally made of acoustic and structural elements **(see 3.3 and 3.4)**.	Not 1 - Gürültü bariyerleri genellikle akustik ve yapısal elemanlardan meydana gelir **(Madde 3.3 ve Madde 3.4'e bakılmalıdır)**	Not 1 - Gürültü bariyerleri genellikle akustik ve yapısal elemanlardan meydana gelir **(3.3 ve 3.4'e bakılmalıdır)**	Accuracy: Addition	Minor	The word "madde" -equivalent of "article"- has been added to the translation.
6	**Table 1 — Symbols and abbreviations**	**Çizelge 1** - Semboller ve kısaltmalar	**Çizelge 1 - Semboller ve kısaltmalar**	Design: Local formatting	Minor	The sentence is completely bold in the ST but not in the TT
6	If the sample under test includes a post having a thickness larger than that of the acoustic elements and protruding toward the interior of the test chamber, the reflective area created by the post fitting the acoustic elements shall be reproduced covering it by reflective strips (see Figure 4).	a) Deneye tabi tutulan numune üzerinde akustik elemanlardan daha geniş bir kalınlığa sahip ve deney odasının içine doğru giren bir direk bulunuyora, akustik elemanı tutan direk tarafından oluşturulan yansıtıcı alan yansıtıcı çubuklar kullanılarak tekrar kapatılmalıdır.	a) Deneye tabi tutulan numune üzerinde akustik elemanlardan daha geniş bir kalınlığa sahip ve deney odasının içine doğru giren bir direk bulunuyorsa, akustik elemanı tutan direk tarafından oluşturulan yansıtıcı alan yansıtıcı çubuklar kullanılarak tekrar kapatılmalıdır.	Fluency: Spelling	Major	According to the TDK, the correct usage of the word is "bulunuyorsa"
6	d) The test specimen shall have a reflecting frame sealed against it on its entire perimeter (see Figure 1 to Figure 5).	d) Deney numunesi, tüm çevresinde sızdırmazlık sağlanmış olan yansıtıcı bir çerçeveye sahip olmalıdır.	d) Deney numunesi, tüm çevresinde sızdırmazlık sağlanmış olan yansıtıcı bir çerçeveye sahip olmalıdır (Bakınız Şekil 1 ila Şekil 5).	Accuracy: Omission	Major	"see Figure 1 to Figure 5" has been omitted in the translation.

6	e) For testing noise barriers, the specimen shall be placed directly against one of the surfaces (floor, wall or ceiling) of the chamber without any gap (see Figure 1, Figure 2 and Figure 3).	e) Gürültü bariyerlerinin deneye tabi tutulması için, deney numunesi doğrudan deney odasının yüzeylerden birinin karşısına herhangi bir boşluk olmadan (zemin, duvar veya tavan) yerleştirilmelidir.	e) Gürültü bariyerlerinin deneye tabi tutulması için, deney numunesi doğrudan deney odasının yüzeylerden birinin karşısına herhangi bir boşluk olmadan (zemin, duvar veya tavan) yerleştirilmelidir (Bakınız Şekil 1, Şekil 2 ve Şekil 3).	Accuracy: Omission	Major	"see Figure 1, Figure 2 and Figure 3" has been omitted in the translation.
6	f) If the sample under test includes non flat panels, leaving cavities between the panels and the chamber floor, these cavities should be completely filled with concrete (see Figure 3).	a) Deneye tabi tutulan panelde, paneller arasında boşluklar oluşturan düzgün olmayan paneller varsa, bu boşluklar tamamen betonla doldurulmalıdır.	a) Deneye tabi tutulan panelde, paneller arasında boşluklar oluşturan düzgün olmayan paneller varsa, bu boşluklar tamamen betonla doldurulmalıdır (Bakınız Şekil 3).	Accuracy: Omission	Major	"see Figure 3" has been omitted in the translation.
6	h) If the sample under test includes a post having a thickness larger than that of the acoustic elements and protruding toward the interior of the test chamber, the reflective area created by the post fitting the acoustic elements shall be reproduced covering it by reflective strips (see Figure 4).	h) Deneye tabi tutulan numune üzerinde akustik elemanlardan daha geniş bir kalınlığa sahip ve deney odasının içine doğru giren bir direk bulunuyora, akustik elemanı tutan direk tarafından oluşturulan yansıtıcı alan yansıtıcı çubuklar kullanılarak tekrar kapatılmalıdır.	h) Deneye tabi tutulan numune üzerinde akustik elemanlardan daha geniş bir kalınlığa sahip ve deney odasının içine doğru giren bir direk bulunuyora, akustik elemanı tutan direk tarafından oluşturulan yansıtıcı alan yansıtıcı çubuklar kullanılarak tekrar kapatılmalıdır (Bakınız Şekil 4).	Accuracy: Omission	Major	"see Figure 4" has been omitted in the translation.
6	i) If the sample under test includes a post having a thickness larger than that of the acoustic elements and protruding toward the floor of the test chamber, the cavities created by the post under the acoustic elements shall be completely filled with concrete (see Figure 5).	i) Deneye tabi tutulan numune üzerinde akustik elemanlardan daha geniş bir kalınlığa sahip ve deney odasının zeminine doğru giren bir direk bulunuyora, akustik elemanın altındaki direk tarafından oluşturulan boşluklar betonla tamamen doldurulmalıdır.	i) Deneye tabi tutulan numune üzerinde akustik elemanlardan daha geniş bir kalınlığa sahip ve deney odasının zeminine doğru giren bir direk bulunuyora, akustik elemanın altındaki direk tarafından oluşturulan boşluklar betonla tamamen doldurulmalıdır (Bakınız Şekil 5).	Accuracy: Omission	Major	"see Figure 5" has been omitted in the translation.
6	(see Figure 1 and Figure 2)	(Şekil 1 ve Şekil 2'ye bakılmalıdır)	(Bakınız Şekil 1 ve Şekil 2)	Fluency: Grammer	Major	The imperative structure of the ST has been translated as necessitative structure in the TT.
7	NOTE	**Not**	NOT	Design: Local formatting	Minor	the word "NOTE" is not bold and it is capitalized, the TT has bold and miniscule
7	**Figure 1 — Illustration of sample arrangement for devices having visible posts — Top: front view; Bottom: side view**	**Şekil 1** – Görünen direkleri bulunan ses yutucu donanım için numune düzeneğinin gösterimi – Üstteki resim: Önden görünüş; Alttaki resim: Yandan görünüş	**Şekil 1 – Görünen direkleri bulunan ses yutucu donanım için numune düzeneğinin gösterimi – Üstteki resim: Önden görünüş; Alttaki resim: Yandan görünüş**	Design: Local formatting	Minor	The sentence is completely bold in the ST but not in the TT
8	**Figure 2 — Illustration of a flat sample arrangement for devices having visible posts — Top: front view; Bottom: side view**	**Şekil 2 –** Görünen direkleri bulunan ses yutucu donanım için düz bir numune düzeneğinin gösterimi – Üstteki resim: Önden görünüş; Alttaki resim: Yandan görünüş	**Şekil 2 – Görünen direkleri bulunan ses yutucu donanım için düz bir numune düzeneğinin gösterimi – Üstteki resim: Önden görünüş; Alttaki resim: Yandan görünüş**	Design: Local formatting	Minor	The sentence is completely bold in the ST but not in the TT
8	NOTE	**Not**	NOT	Design: Local formatting	Minor	the word "NOTE" is not bold and it is capitalized, the TT has bold and miniscule
9	**Figure 3 — (Side view) Illustration of a sample arrangement where the flat side under test is facing the chamber while the other side is non-flat and directly against one of the surfaces (floor) of the chamber without any gap**	**Şekil 3** – (Yandan görünüş) Deneye tabi tutulan düz taraf odaya bakarken ve diğer taraf düz değilken ve herhangi bir boşluk olmaksızın odanın yüzeylerinden birine (zemine) bakarken; numune düzeni için gösterim	**Şekil 3 – (Yandan görünüş) Deneye tabi tutulan düz taraf odaya bakarken ve diğer taraf düz değilken ve herhangi bir boşluk olmaksızın odanın yüzeylerinden birine (zemine) bakarken; numune düzeni için gösterim**	Design: Local formatting	Minor	The sentence is completely bold in the ST but not in the TT
9	NOTE	**Not**	NOT	Design: Local formatting	Minor	the word "NOTE" is not bold and it is capitalized, the TT has bold and miniscule
9	**Figure 4 — (Side view) Illustration of sample arrangement for devices having posts with a thickness larger than that of the acoustic elements and protruding toward the interior of the test chamber**	**Şekil 4** – Akustik elemanlardan daha geniş bir kalınlığa sahip ve deney odasının içine doğru giren direkleri olan cihazlar için numune düzeninin gösterimi	**Şekil 4 – Akustik elemanlardan daha geniş bir kalınlığa sahip ve deney odasının içine doğru giren direkleri olan cihazlar için numune düzeninin gösterimi**	Design: Local formatting	Minor	The sentence is completely bold in the ST but not in the TT
10	**Figure 5 — (Side view) Illustration of sample arrangement for devices having posts with a thicknesslarger than that of the acoustic elements and protruding toward the floor of the test chamber**	**Şekil 5** – (Yandan görünüş) Akustik elemanlardan ve daha geniş bir kalınlığa sahip ve deney odasının içine doğru giren direklere sahip ses yutucu donanım için numune düzeninin gösterimi	**Şekil 5 – (Yandan görünüş) Akustik elemanlardan ve daha geniş bir kalınlığa sahip ve deney odasının içine doğru giren direklere sahip ses yutucu donanım için numune düzeninin gösterimi**	Design: Local formatting	Minor	The sentence is completely bold in the ST but not in the TT
11	The test report shall contain:	Deney raporunda aşağıdaki bilgiler yer almalıdır:	Deney raporu aşağıdakileri içermelidir:	Accuracy: Mistranslation	Major	The subject of the clause is "the test report" in the ST while the subject has shifted to "aşağıdaki bilgiler".
11	a) reference to this European Standard;	a) Bu standarda atıf,	a) Bu Avrupa standardına atıf;	Accuracy: Omission	Major	The statement "European" has been omitted in the translation
12	**Annex A** (informative)	**Ek A** **(Bilgi için)**	**Ek A** (Bilgi için)	Design: Local formatting	Major	The word "informative" is not bold in the ST while it is bold in the TT.
all pages of the standard	the line after the all titles	the line after the all titles	line blanking should be ensured between lines.	Design: Local formatting	Minor	there is single blank after all the titles in the ST, but there is not blank in the TT
all pages of the standard	all pages	all pages	the font size should match between the ST and the TT	Design: Local formatting	Minor	the font size of the TT is bigger than the ST
all pages of the standard	all pages	all pages	all pages should be ensured to indicate "Türk Standardı" statement	Design: Layout	Major	There is not the statement of "Türk Standardı" in any pages. According to the Turkish Standards Preparation Guide, header is given on each top of the page except the cover page. For the single digit pages, the statement of "TÜRK STANDARDI" shall be written on the left side of the header line; the number of the standard and the acceptance date (in years) shall be written on the right side. For the double-numbered pages, the opposite is done.

APPENDIX 2

TSE STANDARD PREPARATION AND TRANSLATION GUIDE

(THE COMMISSION)

TÜRK STANDARDLARI ENSTİTÜSÜ
Standard Hazırlama Merkezi Başkanlığı

Standart Hazırlama Kılavuzu

Ocak 2017

TELİF HAKKI KORUMALI DOKÜMAN

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Neler yeni?

Yenilikler

Bu kılavuz hazırlanırken Enstitüde bugüne dek uygulanan yerleşik kurallarda mümkün olduğunca az değişiklik yapılması ilkesi benimsenmiş ve değişiklikler, gerekli olanlarla sınırlı tutulmaya çalışılmıştır.

Ancak, CEN/CENELEC İç Tüzüğü'ne uygun olarak hazırlanan Çeviri Kılavuzu bugüne dek uygulanan kurallara göre önemli yenilikler içermektedir. Bu yenilikler, biçim ve içerikle ilgili yeniliklerdir.

Biçimle ilgili yenilikler

ISO/IEC ile CEN/CENELEC, 2015 yılından itibaren hazırladığı dokümanlarda yeni şablon (sürüm 2.8f) kullanılmasını uygun görülmüştür. Yeni şablon TSE tarafından aynen kabul edilmiştir. Bu şablonun mevcut şablona göre en önemli özelliği 11 nk Cambria yazı tipi kullanılması ve sayfa tasarımının değişmesidir.

ISO ve CEN şablonuna tam uyum sağlanması temel ilke olarak benimsenmiştir.

Standartları geliştiren kişilerin yeni şablonun kolaylıkla uygulamasını sağlamak amacıyla Standart Hazırlama Kılavuzu'na paralel olarak Microsoft Word yazılımı için geliştirilen TSE şablonunun kullanımı konusunda **TSE Şablonu Kullanım Kılavuzu**'na bakılabilir.

İçerikle ilgili yenilikler

Kullanılan dilde yapılan önemli değişikliklerden bazıları şunlardır:

- Her şeyden önce bağlayıcı dokümanlarda kullanılan dilin olabildiğince Türk Dil Kurumunun (TDK) Yazım Kılavuzu'ndaki yazım kurallarına uygun olması ilkesi benimsenmiştir. Ancak bazı hususlarda TSE'de bugüne dek kullanılan yazım kuralları TDK kurallarından farklılık göstermektedir. Bu gibi durumlarda TDK yazım kurallarından farklı bir uygulama benimsenmiştir.

- TDK Yazım Kılavuzu'nda yer almayan hususlarda, örneğin nicelikler ve büyüklükler ile kısaltmalarda Türkçenin genel kurallarına uygun çözümler üretilmiştir (ör. *h*, *min* gibi birimlerin okunuşu, *max* ve *min* gibi niceliklerin yerine *en küçük* ve *en büyük* gibi ifadelerin kullanılması).

- Yasa ve yönetmeliklerle belirlenen Enstitünün kendi adında ve dairelerin adlarında kullanılan "standard" yazımları hariç, TDK Yazım Kılavuzu'na uyularak "standart" yazımı benimsenmiştir.

- Bazı bölümlerin adlarında değişiklikler yapılmıştır. Örneğin "Normative references" için "Bağlayıcı atıflar" ve "Terms and definitions" "için "Terimler ve tanımlar" karşılıklarının kullanılması benimsenmiştir.

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Giriş

Bu kılavuz, Türk Standardları Enstitüsü tarafından hazırlanan bağlayıcı dokümanlarda kullanılmak amacıyla TSE Standard Hazırlama Merkezi Başkanlığınca oluşturulan Standart Hazırlama Kılavuzu Çalışma Grubu tarafından hazırlanmıştır.

Standart Hazırlama Kılavuzu hakkında

Bu Kılavuz'un hazırlanma nedeni, TSE tarafından hazırlanan standartların kalitesini artırmak amacıyla, özgün standartların hazırlanmasında ve çeviri standartlarda uygulanacak genel kuralların belirlenme ihtiyacıdır. Bu kurallar, genel çeviri kuralları ile bugüne dek yapılan standart hazırlama çalışmalarından elde edilen deneyimlere dayanılarak hazırlanmıştır.

Kılavuz; yazım, noktalama işaretleri, dilbilgisi kuralları ve standartlarla ilgili biçimsel kuralları içerir. Aynı zamanda kuralların uygulanmasıyla ilgili gerekçeler de gösterilmeye çalışılmıştır. Bütün standartlarda olduğu gibi bir standart hazırlama standardı olarak da kabul edilebilecek Standart Hazırlama Kılavuzu, belirli aralıklarla gözden geçirilerek güncellenecektir.

Bu Kılavuz'da yer alan kurallar ve öneriler, standart hazırlayan kişilere ve çevirmenlere yardımcı olacaktır. Bu Kılavuz'la ilgili görüş, öneri ve eleştirileriniz sonraki sürümlerde mutlaka değerlendirilecektir[1].

Bu Kılavuz'un amacı

Bu Kılavuz, standart hazırlama sürecine katılanlara ve diğer dillerde yayımlanmış uluslararası standartları Türkçeye aktaran çevirmenlere ve özgün standart hazırlayan teknik komite üyelerine yönelik hazırlanmıştır. Bu Kılavuz bütün sorulara ve sorunlara cevap verme iddiasında değildir. Ancak, standart hazırlama ve çeviri sırasında burada yer alan kurallara uyulması, daha nitelikli standartlar üretilmesini sağlayacak ve hazırlama sürecini kısaltacaktır.

Kılavuz'da kullanılan yazım kuralları

Standart Hazırlama Kılavuzu, bağlayıcı nitelikteki dokümanların hazırlanmasında yararlanılmak üzere geliştirilmiştir. Kullanım kolaylığı olması açısından, aksi belirtilmediği sürece aşağıdaki metinde "doküman" dendiğinde, bağlayıcı nitelikteki dokümanların hepsi kastedilmektedir.

Bu Kılavuz'da yanlış kullanımla ilgili olarak verilen örneklerin başına yıldız işareti getirilmiştir. Örnekler normal paragraflara göre 1 cm içeriden başlayarak yazılmıştır.

23 Nisan 1920
23 *nisan 1920
17 Temmuz 2015 *perşembe

[1] tk43@tse.gov.tr

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Tavsiye edilen kaynaklar

Standart hazırlama sürecinde Türkçe ile ilgili bilgilenme ihtiyacı duyulduğunda aşağıdaki yayınlardan yararlanılabilir:

Bağlayıcı kaynaklar

1. **Yazım Kılavuzu**
   Türk Dil Kurumu Yayınları, Ankara 2012

2. **Türkçe Sözlük**
   Türk Dil Kurumu Yayınları, Ankara 2009

3. **Güncel Türkçe Sözlük ve Yazım Kılavuzu**
   TDK Web Sitesi (www.tdk.gov.tr)

Bilgilendirici kaynaklar

1. **Türkçe Sözlük ve Yazım Kılavuzu**
   Dil Derneği Web Sitesi (http://www.dildernegi.org.tr.)

2. **Ana Yazım Kılavuzu**
   Ömer Asım Aksoy, Epsilon Yayınevi 2006

3. **Dil Yanlışları**
   Ömer Asım Aksoy, İnkılap Yayınevi 2008

4. **TSE Bilişim Terimleri Sözlüğü**
   TSE Bilgi Teknolojileri ve İletişim İhtisas Kurulu, Ankara 2006

5. **Türkiye Bilişim Derneği Bilişim Sözlüğü**
   (http://www.tbd.org.tr)

6. **ODTÜ Elektronik ve Bilgisayar Terimleri Sözlüğü**
   (http://sozluk.bidb.odtu.edu.tr/)

7. **Çağdaş Türk Dili**
   Süer Eker, Grafiker Yayınları, Ankara 2007

1 Genel kurallar

1.1 **Dil kullanımı**: Standartlarda ölçünlü Türkçe kullanılır. Kullanılan dil açık, net ve kolay anlaşılır olmalıdır. Yansız bir üslup tercih edilmelidir. Metinler dil bilgisi ve yazım kurallarına uygun olmalıdır.

Standartlarda; yapısal özelliklerde, üslup özelliklerinde ve terminolojide tutarlılık ve yeknesaklık sağlanması gerekir. Bu tutarlılık, hem aynı standart içinde, hem de birbirini tamamlayan seri standartlar arasında sağlanmalıdır. Bir kavram için kullanılacak karşılık, kullanıcıların yanıltılmaması için aynı seriye ait standartlarda değişmemelidir.

Karşılaşılan en önemli sorunlardan biri, dil kullanımında gereklilik, bilgi ve tavsiyenin kesinlikle birbirlerinden ayrılması hususudur.

CEN/CENELEC İç Tüzük 3'ün Ek H maddesine göre hükümlerin ifade şekilleri şöyledir:

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Çizelge 1 — Gereklilikler

Fiil kipi	İstisnai durumlarda kullanılan eş değer ifadeler (bk. IR3, 6.6.1.3)
–malı/ –meli (shall)	... gerekir ... gereklidir ... zorunludur yalnızca –a / –e izin verilir
–mamalıdır/ –memelidir (shall not)	–a / –e izin verilmez –maması / –memesi gerekir
İngilizcedeki "must" ifadesini, "shall"in alternatifi olarak kullanmayınız (bu sayede, bir dokümanın gereklilikleri ile dış yasal hükümlerin birbirleriyle karıştırılması önlenir). Bir yasağı ifade etmek için, İngilizcedeki "may not" ifadesi yerine "shall not" kullanmayınız. Bir doğrudan talimatı ifade etmek için, örneğin bir deney yönteminde uygulanması gereken basamaklar belirtilirken, emir kipi veya geniş zaman kullanınız. ÖRNEK: "Kaydedici cihazı açın/açınız." veya "Kaydedici cihaz açılır."	

Çizelge 2 — Tavsiyeler

Fiil kipi	İstisnaî durumlarda kullanılan eş değer ifadeler (bk. 6.6.1.3)
... tavsiye edilir (should)	... önerilir genellikle –ır / –ir
... tavsiye edilmez (should not)	... önerilmez ... yapılmaması tavsiye edilir
Bu bağlamda, "gereklidir" anlamına gelen bir ifade kullanılmamalıdır.	

1.2 **Alıntılar**: Başka bir kaynaktan alınan metinlerde ve başlıklarda, burada yer verilen kurallar yerine alıntı yapılan kaynağa ait kurallara uyulur. Alıntı yapılan metnin alıntı olduğunun anlaşılması

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için tırnak işaretleri arasında yazılması, eğik yazı kullanılması ya da eklenen sözcüklerin köşeli ayraç içine yazılması gibi önlemler alınmalıdır.

2 Terimler ve tanımlar

2.1
standart

mutabakatla oluşturulmuş ve yetkili bir kuruluş tarafından onaylanmış, ortak ve tekrarlanan kullanım için, belirli bir bağlamda en elverişli düzenlemeyi yapmayı hedefleyen kurallar, esaslar veya etkinliklere ilişkin özellikleri veya bunların sonuçlarını belirleyen doküman

[KAYNAK CEN/CENELEC İç Tüzüğü Bölüm 3, 3.1.1]

2.2
Uluslararası Standart

yetkili uluslararası standartlar kuruluşu ISO veya IEC olan Uluslararası Standart

[KAYNAK CEN/CENELEC İç Tüzüğü Bölüm 3, 3.1.3]

2.3
Avrupa Standardı
EN

CEN/CENELEC tarafından kabul edilen ve özdeş ulusal standart olarak uygulamaya konması ve kendisiyle çelişen diğer ulusal standartların iptal edilmesi zorunlu olan standart

[KAYNAK CEN/CENELEC İç Tüzüğü Bölüm 3, 3.1.4]

2.4
Uyumlulaştırma Dokümanı
HD

en azından HD numarasının ve başlığının kamuya duyurulmasıyla ulusal düzeyde uygulamaya konma zorunluluğu olan ve çelişkili ulusal standartların iptal edilmesini gerektiren CENELEC standardı

[KAYNAK CEN/CENELEC İç Tüzüğü Bölüm 3, 3.1.5]

2.5
Teknik Şartname
TS

CEN/CENELEC tarafından kabul edilen, gelecekte bir Avrupa Standardı olarak üzerinde anlaşmaya varılma olasılığı olan, ancak mevcut durumda;

- bir Avrupa Standardı olarak onaylanması için gerekli desteğin elde edilemediği,
- üzerinde uzlaşmaya varılmış olduğu konusunda şüphe bulunan,
- dokümana konu hususun hâlen teknik geliştirme aşamasında olduğu veya
- bir Avrupa Standardı olarak hemen yayımlanmasını engelleyen başka bir sebebin olduğu doküman.

[KAYNAK CEN/CENELEC İç Tüzüğü Bölüm 3, 3.1.6]

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2.6
Teknik Rapor
TR

CEN/CENELEC tarafından kabul edilen, bir Avrupa Standardı veya Teknik Şartname olarak yayımlanmaya uygun olmayan, bilgilendirici hususları içeren doküman

[KAYNAK CEN/CENELEC İç Tüzüğü Bölüm 3, 3.1.7]

2.7
Kılavuz Doküman

CEN veya CENELEC tarafından yayımlanan ve Avrupa standartlaştırma faaliyetleri ile ilgili kuralları, yönlendirmeleri, önerileri veya tavsiyeleri içeren doküman

[KAYNAK CEN/CENELEC İç Tüzüğü Bölüm 3, 3.1.8]

2.8
Kamuya Açık Şartname
PAS

ISO veya IEC tarafından pazarın acil bir ihtiyacını karşılamak üzere yayımlanan ve

a) ISO veya IEC dışındaki bir kuruluş içindeki mutabakata veya

b) bir çalışma grubu içindeki uzmanlar arasındaki mutabakata dayanan doküman

Kayda ait not 1: Kamuya Açık Şartnameler CEN/CENELEC'te yoktur.

[KAYNAK ISO/IEC Direktifi Bölüm 2, 3.1.7]

2.9
Avrupa Çalıştay Anlaşması
CWA

bir çalıştayla geliştirilen, içeriğinden sorumlu belirli bireylerin ve kuruluşların mutabakatını gösteren CEN/CENELEC anlaşması

[KAYNAK CEN/CENELEC İç Tüzüğü Bölüm 3, 3.5.1]

3 Genel bilgiler

TSE tarafından çeviri yoluyla hazırlanan bağlayıcı doküman türleri şunlardır:

İngilizce	Kısaltma	Türkçe	IR3 Başlık No
standard		standart	3.1.1
international standard		uluslararası standart	3.1.2
International Standard	IS	Uluslararası Standart	3.1.3

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European Standard	EN	Avrupa Standardı	3.1.4
Harmonization Document	HD	Uyumlulaştırma Dokümanı	3.1.5
Technical Specification	TS	Teknik Şartname	3.1.6
Technical Report	TR	Teknik Rapor	3.1.7
Guide		Kılavuz Doküman	3.1.8
Publicly Available Specification	PAS	Kamuya Açık Şartname	3.1.9
CEN/CENELEC Workshop Agreement	CWA	CEN/CENELEC Çalıştay Anlaşması	3.5.1

TSE tarafından hazırlanan özgün standartlarda kullanılan ifadeler ve İngilizce karşılıkları şunlardır:

Türkçe	**İngilizce**
Türk Standardları Enstitüsü	Turkish Standards Institution
Standart Hazırlama Merkezi Başkanlığı	Standards Development Center
Grup Başkanlığı	Department
Türk Standardı	Turkish Standard
Türk Standardı Tasarısı	Draft Turkish Standard
yönetmelik	directive
tüzük	regulation
madde	article
bent	point

3.1 Standardizasyon kuruluşları

İngilizce	**Kısaltma**	**Türkçe**
International Organization for Standardization	ISO	Uluslararası Standardizasyon Kuruluşu
International Electrotechnical Commission	IEC	Uluslararası Elektroteknik Komisyonu

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European Committee for Standardization	CEN	Avrupa Standardizasyon Komitesi
European Committee for Electrotechnical Standardization	CENELEC	Avrupa Elektroteknik Standardizasyon Komitesi

3.2 Standart hazırlama süreçleri

TSE tarafından üç ayrı yöntemle Türk Standardı hazırlanmaktadır:

1. Özgün (Sentez) Türk Standardı
2. Özdeş (Adapte) Türk Standardı
3. Çeviri Türk Standardı

Bu standartların özellikleri, hazırlanma şekilleri ve hazırlanma süreçlerinde dikkat edilmesi gereken hususlar aşağıda açıklanmıştır.

3.2.1 Özgün (Sentez) Türk Standardı

Çeşitli kaynaklardan yararlanılarak Türkiye koşullarına uygun olarak hazırlanan Türk Standartları'dır.

3.2.2 Özdeş (Adapte) Türk Standardı

Türkçe çevirisi henüz hazırlanmayan Uluslararası Standartlar'ın ve Avrupa Standartları'nın İngilizce metinlerinin başına Türkçe ulusal kapak sayfası ile ulusal önsöz eklenerek yayımlanan standartlardır.

3.2.3 Çeviri Türk Standardı

Uluslararası veya Avrupa standardizasyon kuruluşları tarafından İngilizce, Fransızca veya Almanca hazırlanan standartların Türkçe çevirisi ile oluşturulan standartlardır.

4 Özgün (Sentez) Türk Standartları

Özgün standartlar hazırlanış amaçlarına veya işlevlerine göre farklılıklar göstermektedir. TSE tarafından hazırlanan özgün standartlar

- Ürün standardı
- Deney yöntemi standardı
- Kural standardı
- Terimler ve tanımlar (sözlük) standardı

şeklinde tanımlanabilir.

4.1 Ürün standartları

Ürün standartlarında yer alan bölümler ve bu bölümlerde bulunması gereken bilgiler aşağıda açıklanmıştır. Bu bölümde açıklanan kurallara ilişkin örnekler için Ürün standardı örneği bölümüne bakınız.

Kapak sayfası

Her standartta Ürün standardı örneği bölümünde örneği verilen bir kapak sayfası bulunmalıdır.

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Üst bilgi

Kapak sayfası dışında her sayfanın başında üst bilgi verilir. Tek rakamlı sayfalarda üst bilgi satırında sola dayalı olarak "TÜRK STANDARDI" ifadesi, sağa dayalı olarak da standardın numarası ve kabul tarihi (yıl olarak) yazılır. Çift rakamlı sayfalarda ise bunun tersi yapılır.

Alt bilgi

Standart sayfalarında alt bilgi satırına "telif hakkı" yazısı ile sayfa numarası yansımalı şekilde yazılır.

Önsöz

Madde mamul standardında kapak sayfasından sonra "**Önsöz"** sayfası yer almalıdır.

Önsöz metninde standardın hangi İhtisasa Kurulu ve hangi Teknik Komite tarafından hazırlandığı belirtilmelidir. Standart Teknik Kurul aşamasına gelmişse, Teknik Kurulda kabul edildiği tarih yazılmalıdır.

Bu standardın daha önce yapılmış baskıları varsa bunların geçersiz olduğu belirtilmelidir.

Bu standarttaki patent hakkı ile ilgili ifade yazılmalıdır.

İçindekiler

İçindekiler sayfası oluşturulur.

Sayfa numarası olarak kapak ve kapağın arkası Romen rakamlarıyla 1 ve 2. sayfa olarak düşünülür ama bu sayfalara sayfa numarası yazılmaz. Daha sonra ana metne kadar olan kısma küçük Romen rakamlarıyla üçten itibaren sayfa numarası yazılır.

Giriş

Gerekli görülüyorsa standardın hazırlanma gerekçesini ve benzeri bilgileri içeren "Giriş" maddesi eklenebilir. Bu bölümde gereklilikler yer almaz. Giriş maddesinin bulunduğu sayfaya Romen rakamlarıyla sayfa numarası verilir. Giriş maddesi ayrı bir sayfada verilir.

Giriş bölümüne madde numarası verilmez. Ancak numara verilmesi mutlaka gerekliyse Giriş maddesi 0 ile numaralandırılır. Giriş'te yer alan denklem, çizelge şekil gibi numaralandırılması gereken öğeler 1 ile başlanarak numaralandırılır.

Ana metin

Ana metin, başlık yazılmadan "Kapsam" maddesi ile başlar.

1 Kapsam

Standartların ana metni (gövde bölümü), standardın adından sonra kapsam maddesi ile başlamak zorundadır. Bu maddede dokümanın konusu açıklanır ve dokümanın tamamen ya da kısmen uygulanması ile ilgili sınırlar belirlenir. Kapsam maddesinde de gereklilikler yer almaz.

Kapsam maddesinin kütüphanecilik hizmetinde de kullanılacağı göz önüne alınarak kısa ve uygun hazırlanmalıdır. Bu nedenle, "...'in ölçülerini", "... yöntemini" ve "...'in özelliklerini belirler" ya da "... için kullanılacak sistem" ve "... için genel ilkeleri gösterir" ya da "... için ilkeleri belirtir" ve "... terimleri tanımlar" gibi ifadeler kullanılabilir.

Kapsam maddesinde standardın başlığıyla ilgili madde mamulü uzun olarak ifade eden terimlerin yerine bu ifadenin ne şekilde kısaltılarak kullanıldığını belirten bir **NOT** yazılabilir.

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2 Bağlayıcı atıflar

Bağlayıcı atıflar maddesinde "Bu standartta diğer standart ve/veya dokümanlara atıf yapılmaktadır. Bu atıflar metin içerisinde uygun yerlerde belirtilmiş ve aşağıda liste halinde verilmiştir. Tarihli atıflarda, yalnızca alıntı yapılan baskı geçerlidir. Tarihli olmayan dokümanlar için, atıf yapılan dokümanın (tüm tadiller dâhil) son baskısı geçerlidir. * İşaretli olanlar bu standardın basıldığı tarihte İngilizce metin olarak yayımlanmış olan Türk Standartları'dır" ifadesinden sonra alt satırdan başlanarak listede yer alan standartların numaraları ve adları normal yazı tipi ile yazılır. Bağlayıcı atıflar sadece Türk Standartları'na yapılabilir.

3 Terimler ve tanımlar

Bu madde bir standartta yer alması gereken zorunlu maddelerden birisidir. Terimler ve tanımlar maddesinde, söz konusu standartta kullanılan terimlerin doğru anlaşılması için gereken bilgiler yer alır.

Bu madde tamamen terminoloji sözlüğü (terimlik) oluşturma yaklaşımına göre hazırlanmalıdır.

Terminoloji çalışmalarında kullanılan yöntemler TS ISO 704 standardında tanımlanmıştır. Standartların bu bölümlerinde yer alan terimler bağımsız terimlik olarak yayımlanabilir ve terminoloji veri tabanlarına kaydedilebilir.

Terimler ve tanımlar maddesinde uyulacak ilkeler şunlardır:

- Bu maddede yer alan numaralar bölüm numaraları değil, terimlere kolay ulaşılmasını sağlamak üzere kullanılan atıf numaralarıdır ve bu nedenle bunlar standardın İçindekiler bölümünde yer almaz.
- Her terim atıf numarasından sonra gelen satırdan başlanarak ayrı bir satıra yazılır. Terimlerin yazılışındaki büyük ve küçük harf kullanımı cümle içinde yazılışları gibidir.
- Tanımlar da ayrı bir satırdan başlar ve küçük harfle başlanarak yazılır. Tanımlar tam bir cümle oluşturmadıkları için sonlarına nokta vb. gibi cümlenin bittiğini gösteren noktalama işaretleri konmaz.

Terimler ve tanımlar maddesinde verilecek notlar bir tane bile olsa numaralandırılır ve "**Kayda ait not"** şeklinde verilir.

4 Sınıflandırma ve özellikler

Bu madde bir standartta yer alması gereken zorunlu maddelerden biridir. Başlıca iki alt maddeden oluşur:

4.1 Sınıflandırma

Sınıflandırma maddesi ürünün özelliğine bağlı olarak

Sanayi Ürünleri	Orman Ürünleri	Tarım Ürünleri
Sınıf	Sınıf	Grup
	Cins	Tür
Tip	Tür	Tip
Tür	Çeşit	Çeşit
Çeşit	Tip	Sınıf
Biçim	Grup	Derece
Seçim (Tekstil İçin)		Boy

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alt maddelerine ayrılabilir.

4.2 Özellikler

Bu maddede ürün için aranan özellikler metin, çizelge veya alt maddeler hâlinde verilir.

4.3 Özellik, muayene ve deney madde numaraları

Bu alt maddede aranan özellikler, özelliğin yer aldığı madde numarası ve bu özelliğin muayene veya deneyle belirlendiği madde numarası çizelge hâlinde verilir.

5 Numune alma, muayene ve deneyler

5.1 Numune alma

Numunenin nasıl alınacağı, ne kadar numune alınacağı ve nasıl hazırlanacağı vb. hususlar ya bağlayıcı bir standarda atıf yapılarak ya da açıkça belirtilerek bu maddede verilir.

5.2 Muayeneler

Bu maddede Madde 4'te verilen özelliklerden muayene edilerek belirlenecek özelliklerin (ambalaj muayenesi, görünüş muayenesi vb.) muayene şekli belirtilir.

5.3 Deneyler

Bu maddede Madde 4'te aranan özelliklerin nasıl belirleneceği bağlayıcı atıf yapılarak veya ayrıntılı bir şekilde yazılarak alt maddeler veya çizelge şeklinde verilir.

5.4 Değerlendirme

Bu maddede muayene ve/veya deney sonuçları değerlendirilerek ürünün standarda uygun olup olmadığı belirtilir.

5.5 Muayene ve deney raporu

Bu maddede muayene ve deney raporunda en az hangi bilgilerin bulunması gerektiği, ayrı satırlarda belirtilir.

6 Piyasaya arz

Standartta zorunlu olarak bulunması gereken bu madde aşağıdaki alt maddelerden oluşur.

6.1 Ambalajlama

6.2 İşaretleme

7 Çeşitli Hükümler

Ekler

Bağlayıcı veya bilgi için olduğu belirtilerek her ek yeni bir sayfadan başlamak üzere Ek A, Ek B, Ek C. şeklinde adlandırılır. Ekler gerektiğinde alt maddelere (A.1, A.2, A.3 gibi) ayrılarak verilir.

Kaynaklar

Ayrı bir sayfadan başlanarak bu standardın hazırlanmasında kullanılan kaynaklar dizin hâlinde verilir.

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4.2 Deney yöntemi standartları

Deney yöntemini belirleyen standartlarda yer alan bölümler ve bu bölümlerde bulunması gereken bilgiler aşağıda açıklanmıştır. Bu bölümde açıklanan kurallara ilişkin örnekler için Deney yöntemi standardı örneği bölümüne bakınız.

Kapak sayfası

Her standartta Deney yöntemi standardı örneği bölümünde örneği verilen bir kapak sayfası bulunmalıdır.

Üst bilgi

Kapak sayfası dışında her sayfanın başında üst bilgi verilir. Tek rakamlı sayfalarda üst bilgi satırında sola dayalı olarak "TÜRK STANDARDI" ifadesi, sağa dayalı olarak da standardın numarası ve kabul tarihi (yıl olarak) yazılır. Çift rakamlı sayfalarda ise bunun tersi yapılır.

Alt bilgi

Standart sayfalarında alt bilgi satırına "telif hakkı" yazısı ile sayfa numarası yansımalı şekilde yazılır.

Önsöz

Madde mamul standardında kapak sayfasından sonra "**Önsöz"** sayfası yer almalıdır.

Önsöz metninde standardın hangi İhtisas Kurulu ve hangi Teknik Komite tarafından hazırlandığı belirtilmelidir. Standart Teknik Kurul aşamasına gelmişse Teknik Kurulda kabul edildiği tarih yazılmalıdır.

Bu standardın daha önce yapılmış baskıları varsa bunların geçersiz olduğu belirtilmelidir.

Bu standarttaki patent hakkı ile ilgili ifade yazılmalıdır.

İçindekiler

İçindekiler sayfası otomatik oluşturulur.

Sayfa numarası olarak kapak ve kapağın arkası Romen rakamlarıyla 1 ve 2. sayfa olarak düşünülür ama bu sayfalara sayfa numarası yazılmaz. Daha sonra ana metne kadar olan kısma küçük Romen rakamlarıyla üçten itibaren sayfa numarası yazılır.

Giriş

Gerekli görülüyorsa standardın hazırlanma gerekçesini ve benzeri bilgileri içeren "Giriş" maddesi eklenebilir. Bu bölümde gereklilikler yer almaz. Giriş maddesinin bulunduğu sayfaya Romen rakamlarıyla sayfa numarası verilir. Giriş maddesi ayrı bir sayfada verilir.

Giriş bölümüne madde numarası verilmez. Ancak numara verilmesi mutlaka gerekliyse Giriş maddesi 0 ile numaralandırılır. Girişte yer alan denklem, çizelge şekil gibi numaralandırılması gereken öğeler 1 ile başlanarak numaralandırılır.

Ana metin

Ana metin, başlık yazılmadan "Kapsam" maddesi ile başlar.

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1 Kapsam

Standartların ana metni (gövde bölümü), standardın adından sonra kapsam maddesi ile başlamak zorundadır. Bu maddede dokümanın konusu açıklanır ve dokümanın tamamen ya da kısmen uygulanması ile ilgili sınırlar belirlenir. Kapsam maddesinde de gereklilikler yer almaz.

Kapsam maddesinin kütüphanecilik hizmetinde de kullanılacağı göz önüne alınarak kısa ve uygun hazırlanmalıdır. Bu nedenle, "...'in ölçülerini", "... yöntemini" ve "...'in özelliklerini belirler" ya da "... için kullanılacak sistem" ve "... için genel ilkeleri gösterir" ya da "... için ilkeleri belirtir" ve "... terimleri tanımlar" gibi ifadeler kullanılabilir.

Kapsam maddesinde standardın başlığıyla ilgili madde mamulü uzun olarak ifade eden terimlerin yerine bu ifadenin ne şekilde kısaltılarak kullanıldığını belirten bir **NOT** yazılabilir.

2 Bağlayıcı atıflar

Bağlayıcı atıflar maddesinde "Bu standartta diğer standart ve/veya dokümanlara atıf yapılmaktadır. Bu atıflar metin içerisinde uygun yerlerde belirtilmiş ve aşağıda liste hâlinde verilmiştir. Tarihli atıflarda, yalnızca alıntı yapılan baskı geçerlidir. Tarihli olmayan dokümanlar için, atıf yapılan dokümanın (tüm tadiller dâhil) son baskısı geçerlidir. * İşaretli olanlar bu standardın basıldığı tarihte İngilizce metin olarak yayımlanmış olan Türk Standartları'dır" ifadesinden sonra alt satırdan başlanarak listede yer alan standartların numaraları normal yazı tipi ile yazılırken adları eğik yazı tipi ile yazılır. Bağlayıcı atıflar sadece Türk Standartları'na yapılabilir.

3 Terimler ve tanımlar

Bu madde bir standartta yer alması gereken zorunlu maddelerden birisidir. Terimler ve tanımlar maddesinde, söz konusu standartta kullanılan terimlerin doğru anlaşılması için gereken bilgiler yer alır.

Bu madde tamamen terminoloji sözlüğü (terimlik) oluşturma yaklaşımına göre hazırlanmalıdır.

Terminoloji çalışmalarında kullanılan yöntemler TS ISO 704 standardında tanımlanmıştır. Standartların bu bölümlerinde yer alan terimler bağımsız terimlik olarak yayımlanabilir ve terminoloji veri tabanlarına kaydedilebilir.

Terimler ve tanımlar maddesinde uyulacak ilkeler şunlardır:

- Bu maddede yer alan numaralar bölüm numaraları değil, terimlere kolay ulaşılmasını sağlamak üzere kullanılan atıf numaralarıdır ve bu nedenle bunlar standardın içindekiler bölümünde yer almaz.
- Her terim atıf numarasından sonra gelen satırdan başlanarak ayrı bir satıra yazılır. Terimlerin yazılışındaki büyük ve küçük harf kullanımı, cümle içinde yazılışları gibidir.
- Tanımlar da ayrı bir satırdan başlar ve küçük harfle başlanarak yazılır. Tanımlar tam bir cümle oluşturmadıkları için sonlarına nokta vb. gibi cümlenin bittiğini gösteren noktalama işaretleri konmaz.

Terimler ve tanımlar maddesinde verilecek notlar bir tane bile olsa numaralandırılır ve "**Kayda ait not"** şeklinde verilir.

4 Deney yönteminin adı

Bu maddede deney yönteminin adı en anlaşılır şekilde yazılır. Bu madde deneyin niteliğine göre "4.1 İlke"; "4.2 Cihaz ve malzemeler"; "4.3 Reaktifler"; 4.4 Tayin"; "4.5 Hesaplama ve sonuçların gösterilmesi" gibi alt maddeler içerebilir. Madde 4.2 ve 4.3'te deneyde kullanılan cihazların ve

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reaktiflerin varsa sahip olması gereken özellikleri de yazılır. Varsa kesinlik ve doğruluk bilgileri de alt madde olarak verilir.

5 Muayene ve deney raporu

Bu maddede muayene ve deney raporunda en az hangi bilgilerin bulunması gerektiği, ayrı satırlarda belirtilir. Gerekli olduğunda deney raporu için TS EN ISO/IEC 17025'e atıf yapılabilir.

Ekler

Bağlayıcı veya bilgi için olduğu belirtilerek varsa her ek yeni bir sayfadan başlamak üzere Ek A, Ek B, Ek C. şeklinde adlandırılır. Ekler gerektiğinde alt maddelere (A.1, A.2, A.3. gibi) ayrılarak verilir.

Kaynaklar

Ayrı bir sayfadan başlanarak bu standardın hazırlanmasında kullanılan kaynaklar dizin halinde verilir.

4.3 Kural standartları

Kural standartlarında yer alan bölümler ve bu bölümlerde bulunması gereken bilgiler aşağıda açıklanmıştır. Bu bölümde açıklanan kurallara ilişkin örnekler için Kural standardı örneği bölümüne bakınız.

Kapak sayfası

Her standartta Kural standardı örneği bölümünde örneği verilen bir kapak sayfası bulunmalıdır.

Üst bilgi

Kapak sayfası dışında her sayfanın başında üst bilgi verilir. Tek rakamlı sayfalarda üst bilgi satırında sola dayalı olarak "TÜRK STANDARDI" ifadesi, sağa dayalı olarak da standardın numarası ve kabul tarihi (yıl olarak) yazılır. Çift rakamlı sayfalarda ise bunun tersi yapılır.

Alt bilgi

Standart sayfalarında alt bilgi satırına "telif hakkı" yazısı ile sayfa numarası yansımalı şekilde yazılır.

Önsöz

Kural standardında kapak sayfasından sonra "**Önsöz"** sayfası yer almalıdır.

Önsöz metninde standardın hangi İhtisas Kurulu ve hangi Teknik Komite tarafından hazırlandığı belirtilmelidir. Standart Teknik Kurul aşamasına gelmişse, Teknik Kurulda kabul edildiği tarih yazılmalıdır.

Bu standardın daha önce yapılmış baskıları varsa bunların geçersiz olduğu belirtilmelidir.

Bu standarttaki patent hakkı ile ilgili ifade yazılmalıdır.

İçindekiler

İçindekiler sayfası oluşturulur.

Sayfa numarası olarak kapak ve kapağın arkası Romen rakamlarıyla 1 ve 2. sayfa olarak düşünülür ama bu sayfalara sayfa numarası yazılmaz. Daha sonra ana metne kadar olan kısma küçük Romen rakamlarıyla üçten itibaren sayfa numarası yazılır.

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Giriş

Gerekli görülüyorsa standardın hazırlanma gerekçesini ve benzeri bilgileri içeren "Giriş" maddesi eklenebilir. Bu bölümde gereklilikler yer almaz. Giriş maddesinin bulunduğu sayfaya Romen rakamlarıyla sayfa numarası verilir. Giriş maddesi ayrı bir sayfada verilir.

Giriş bölümüne madde numarası verilmez. Ancak numara verilmesi mutlaka gerekliyse Giriş maddesi 0 ile numaralandırılır. Girişte yer alan denklem, çizelge şekil gibi numaralandırılması gereken öğeler 1 ile başlanarak numaralandırılır.

Ana metin

Ana metin başlık yazılmadan "1 Kapsam" maddesi ile başlar.

1 Kapsam

Standartların ana metni (gövde bölümü), standardın adından sonra kapsam maddesi ile başlamak zorundadır. Bu maddede dokümanın konusu açıklanır ve dokümanın tamamen ya da kısmen uygulanması ile ilgili sınırlar belirlenir. Kapsam maddesinde de gereklilikler yer almaz.

Kapsam maddesinin kütüphanecilik hizmetinde de kullanılacağı göz önüne alınarak kısa ve uygun hazırlanmalıdır. Bu nedenle, "...'in ölçütlerini", "... kriterlerini" ve "...'in kurallarını belirler" ya da "... için kullanılacak kuralları" ve "... için genel ilkeleri gösterir" ya da "... için ilkeleri belirtir" ve "... terimleri tanımlar" gibi ifadeler kullanılabilir.

Kapsam maddesinde standardın başlığıyla ilgili ifadeleri uzun olarak veren terimlerin yerine bu ifadenin ne şekilde kısaltılarak kullanıldığını belirten bir **NOT** yazılabilir.

2 Bağlayıcı atıflar

Bağlayıcı atıflar maddesinde "Bu standartta diğer standart ve/veya dokümanlara atıf yapılmaktadır. Bu atıflar metin içerisinde uygun yerlerde belirtilmiş ve aşağıda liste hâlinde verilmiştir. Tarihli atıflarda, yalnızca alıntı yapılan baskı geçerlidir. Tarihli olmayan dokümanlar için, atıf yapılan dokümanın (tüm tadiller dâhil) son baskısı geçerlidir. * İşaretli olanlar bu standardın basıldığı tarihte İngilizce metin olarak yayımlanmış olan Türk Standartları'dır" ifadesinden sonra alt satırdan başlanarak listede yer alan standartların numaraları normal yazı tipi ile yazılırken adları eğik yazı tipi ile yazılır. Bağlayıcı atıflar sadece Türk Standartları'na yapılabilir.

3 Terimler ve tanımlar

Bu madde bir standartta yer alması gereken zorunlu maddelerden birisidir. Terimler ve tanımlar maddesinde, söz konusu standartta kullanılan terimlerin doğru anlaşılması için gereken bilgiler yer alır.

Bu madde tamamen terminoloji sözlüğü (terimlik) oluşturma yaklaşımına göre hazırlanmalıdır.

Terminoloji çalışmalarında kullanılan yöntemler TS ISO 704 standardında tanımlanmıştır. Standartların bu bölümlerinde yer alan terimler bağımsız terimlik olarak yayımlanabilir ve terminoloji veri tabanlarına kaydedilebilir.

Terimler ve tanımlar maddesinde uyulacak ilkeler şunlardır:

- Bu maddede yer alan numaralar bölüm numaraları değil, terimlere kolay ulaşılmasını sağlamak üzere kullanılan atıf numaralarıdır ve bu nedenle bunlar standardın İçindekiler bölümünde yer almaz.

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- Her terim atıf numarasından sonra gelen satırdan başlanarak ayrı bir satıra yazılır. Terimlerin yazılışındaki büyük ve küçük harf kullanımı cümle içinde yazılışları gibidir.
- Tanımlar da ayrı bir satırdan başlar ve küçük harfle başlanarak yazılır. Tanımlar tam bir cümle oluşturmadıkları için sonlarına nokta vb. gibi cümlenin bittiğini gösteren noktalama işaretleri konmaz.

Terimler ve tanımlar maddesinde verilecek notlar bir tane bile olsa numaralandırılır ve "**Kayda ait not**" şeklinde verilir.

4 Kurallar

Bu maddede standardın kapsamındaki hususlarla ilgili kurallar doğrudan veya gerekli hallerde alt maddeler şeklinde ayrılarak belirtilir.

5 Çeşitli hükümler

Bu maddede standarda kurallara uygunluk beyannamesi verilmesi veya gösterilmesiyle ilgili hüküm belirtilir.

6 Yararlanılan kaynaklar

Ayrı bir sayfadan başlanarak bu standardın hazırlanmasında kullanılan kaynaklar dizin hâlinde verilir.

4.4 Terimler ve tanımlar (sözlük) standardı

Terimler ve tanımlar standartlarında yer alan bölümler ve bu bölümlerde bulunması gereken bilgiler aşağıda açıklanmıştır. Bu bölümde açıklanan kurallara ilişkin örnekler için Terimler ve tanımlar standardı örneği bölümüne bakınız.

Kapak sayfası

Her standartta Terimler ve tanımlar standardı örneği bölümünde örneği verilen bir kapak sayfası bulunmalıdır.

Üst bilgi

Kapak sayfası dışında her sayfanın başında üst bilgi verilir. Tek rakamlı sayfalarda üst bilgi satırında sola dayalı olarak "TÜRK STANDARDI" ifadesi, sağa dayalı olarak da standardın numarası ve kabul tarihi (yıl olarak) yazılır. Çift rakamlı sayfalarda ise bunun tersi yapılır.

Alt bilgi

Standart sayfalarında alt bilgi satırına "telif hakkı" yazısı ile sayfa numarası yansımalı şekilde yazılır.

Önsöz

Terimler ve tanımlar standardında kapak sayfasından sonra "**Önsöz**" sayfası yer almalıdır.

Önsöz metninde standardın hangi İhtisasa Kurulu ve hangi Teknik Komite tarafından hazırlandığı belirtilmelidir. Standart Teknik Kurul aşamasına gelmişse, Teknik Kurulda kabul edildiği tarih yazılmalıdır.

Bu standardın daha önce yapılmış baskıları varsa bunların geçersiz olduğu belirtilmelidir.

Bu standarttaki patent hakkı ile ilgili ifade yazılmalıdır.

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İçindekiler

İçindekiler sayfası oluşturulur.

Sayfa numarası olarak kapak ve kapağın arkası Romen rakamlarıyla 1 ve 2. sayfa olarak düşünülür ama bu sayfalara sayfa numarası yazılmaz. Daha sonra ana metne kadar olan kısma küçük Romen rakamlarıyla üçten itibaren sayfa numarası yazılır.

Giriş

Gerekli görülüyorsa standardın hazırlanma gerekçesini ve benzeri bilgileri içeren "Giriş" maddesi eklenebilir. Bu bölümde gereklilikler yer almaz. Giriş maddesinin bulunduğu sayfaya Romen rakamlarıyla sayfa numarası verilir. Giriş maddesi ayrı bir sayfada verilir.

Giriş bölümüne madde numarası verilmez. Ancak numara verilmesi mutlaka gerekliyse Giriş maddesi 0 ile numaralandırılır. Giriş'te yer alan denklem, çizelge şekil gibi numaralandırılması gereken öğeler 1 ile başlanarak numaralandırılır.

Ana metin

Ana metin, başlık yazılmadan "Kapsam" maddesi ile başlar.

1 Kapsam

Standartların ana metni (gövde bölümü), standardın adından sonra kapsam maddesi ile başlamak zorundadır. Bu maddede dokümanın konusu açıklanır ve dokümanın tamamen ya da kısmen uygulanması ile ilgili sınırlar belirlenir. Kapsam maddesinde de gereklilikler yer almaz.

Kapsam maddesinin kütüphanecilik hizmetinde de kullanılacağı göz önüne alınarak kısa ve uygun hazırlanmalıdır.

2 Bağlayıcı atıflar

Varsa Bağlayıcı atıflar maddesinde "Bu standartta diğer standart ve/veya dokümanlara atıf yapılmaktadır. Bu atıflar metin içerisinde uygun yerlerde belirtilmiş ve aşağıda liste halinde verilmiştir. Tarihli atıflarda, yalnızca alıntı yapılan baskı geçerlidir. Tarihli olmayan dokümanlar için, atıf yapılan dokümanın (tüm tadiller dâhil) son baskısı geçerlidir. * İşaretli olanlar bu standardın basıldığı tarihte İngilizce metin olarak yayımlanmış olan Türk Standartları'dır" ifadesinden sonra alt satırdan başlanarak listede yer alan standartların numaraları ve adları normal yazı tipi ile yazılır. Bağlayıcı atıflar sadece Türk Standartları'na yapılabilir.

3 Terimler ve tanımlar

Bu madde bu standartta yer alması gereken zorunlu maddelerden birisidir. Terimler ve tanımlar maddesinde, söz konusu standartta kullanılan terimlerin doğru anlaşılması için gereken bilgiler yer alır.

Bu madde tamamen terminoloji sözlüğü (terimlik) oluşturma yaklaşımına göre hazırlanmalıdır.

Terminoloji çalışmalarında kullanılan yöntemler TS ISO 704 standardında tanımlanmıştır. Standartların bu bölümlerinde yer alan terimler bağımsız terimlik olarak yayımlanabilir ve terminoloji veri tabanlarına kaydedilebilir.

Terimler ve tanımlar maddesinde uyulacak ilkeler şunlardır:

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- Bu maddede yer alan numaralar bölüm numaraları değil, terimlere kolay ulaşılmasını sağlamak üzere kullanılan atıf numaralarıdır ve bu nedenle bunlar standardın İçindekiler bölümünde yer almaz.
- Her terim atıf numarasından sonra gelen satırdan başlanarak ayrı bir satıra yazılır. Terimlerin yazılışındaki büyük ve küçük harf kullanımı cümle içinde yazılışları gibidir.
- Tanımlar da ayrı bir satırdan başlar ve küçük harfle başlanarak yazılır. Tanımlar tam bir cümle oluşturmadıkları için sonlarına nokta vb. gibi cümlenin bittiğini gösteren noktalama işaretleri konmaz.

Terimler ve tanımlar maddesinde varsa verilecek notlar bir tane bile olsa numaralandırılır ve "**Kayda ait not 1**", "**Kayda ait not 2**" vb. şeklinde verilir.

ÖRNEK

3.17
torba kalıplama

sağlam bir kalıp üzerine veya içerisine konulan takviye edilmiş plastiğin, lastik torba gibi esnek bir membran vasıtasıyla üniform olarak sıkıştırılması ile kalıplanması

Kayda ait not 1 Torba kalıplama, torbanın malzeme üzerine sıkıştırılması yöntemine bağlı olarak, otoklav kalıplama, basınçlı torba kalıplama ve vakumlu torba kalıplama olarak da adlandırılır.

Gerekli görüldüğünde terimler alt sınıflara ayrılarak da gruplandırılabilir. Örneğin: Genel terimler, Mekanik yapı, Programlama ve kontrol vb.

Ekler

Bağlayıcı veya bilgi için olduğu belirtilerek her ek yeni bir sayfadan başlamak üzere Ek A, Ek B, Ek C. şeklinde adlandırılır. Ekler gerektiğinde alt maddelere (A.1, A.2, A.3 gibi) ayrılarak verilir.

Kaynaklar

Ayrı bir sayfadan başlanarak bu standardın hazırlanmasında kullanılan kaynaklar dizin hâlinde verilir.

Dizin

Gerekli görüldüğünde ayrı bir sayfadan başlanarak standartta yer alan terimlerin listesi, varsa diğer dillerdeki karşılıkları ile birlikte terim numaraları gösterilmek suretiyle sıralanır.

Gerekli hallerde, diğer dillerdeki terimlerin Türkçe karşılıklarını gösteren dizinler de oluşturulabilir.

5 Özdeş (Adapte) Türk Standartları

Özdeş Türk Standardı hazırlanmasında da bu Kılavuz'un diğer maddelerinde yer alan kurallar geçerlidir. Özdeş standartlar şu üç bölümden oluşur:

- Ulusal kapak sayfası (Bk. 7.1)
- Ulusal önsöz (Bk. 7.2)
- İngilizce metin

Özdeş Türk Standartları'nın sayfa tasarımı Kılavuz'un diğer maddelerinde tanımlanmıştır (Bk. 8.1). Sayfaların numaralandırılmasında ve üst/alt bilgi satırlarının düzenlenmesinde ve biçimle ilgili diğer konularda Çeviri standartlarda belirlenen kurallara uyulmalıdır.

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Özdeş standartlarda yer alan İngilizce metin üzerinde herhangi bir değişiklik yapılmaz.

Özdeş standartların başlıklarının çevirisinde aynı serideki standartların başlıklarının önceden yapılan çevirisinden yararlanılmalı, aynı seride yer alan standartlara ait ve İngilizcesi aynı olan başlıkların farklı şekillerde Türkçeye çevrilmesi önlenmelidir.

ÖRNEK

TS EN 13508-1 *Drenaj ve kanalizasyon sistemlerinin incelenmesi ve değerlendirilmesi - Bina dışı - Bölüm 1: Genel gerekler*

TS EN 13508-1 (İngilizce Metin) *Ana tahliye ve kanalizasyon sistemlerinin durumu - Bina dışı - Bölüm 1: Genel özellikler*

6 Çeviri Türk Standartları

Bugün dünyanın birçok ülkesinde standartlaştırma çalışmaları, uluslararası ya da bölgesel standartların özdeş standart olarak kabul edilmesi ya da çeviri yoluyla sürdürülmektedir. TSE'de her iki yöntem de uygulanmaktadır. Özellikle CEN standartlarının en geç iki yıl içinde ulusal standart olarak kabul edilmesi ve ulusal mevzuatta mevcut olabilecek aykırılıkların ortadan kaldırılması zorunluluğu bulunmaktadır.

Kurumumuz, ülkemizin ihtiyacı olan standartların Türkçe olarak yayımlanması ilkesini benimsemiştir. Bu nedenle çeviri standartların kaliteli olarak hazırlanması konusunda gayret etmektedir.

Çeviri standartlarda kalite güvencesinin sağlanması için çeviriler TS ISO 17100:2015 *Çeviri hizmetleri – Çeviri hizmetleri için gereklilikler* standardına uygun olarak yapılmaktadır. Bu standarda uygun çeviri süreci şu şekilde düzenlenmiştir:

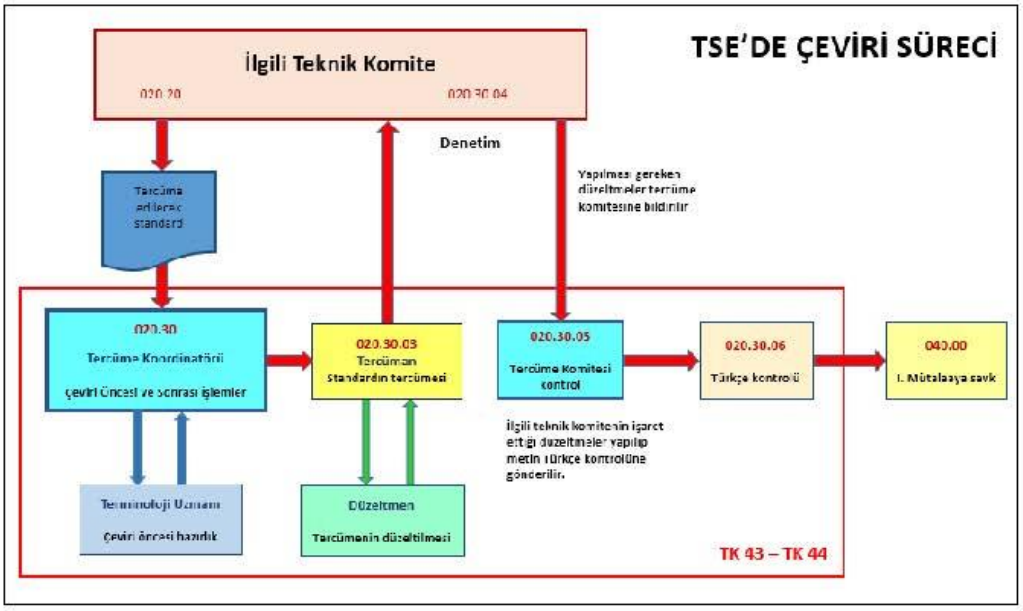
1. Metnin çevirisi
2. Çevirmen tarafından kontrolü
3. İkinci çevirmen tarafından düzeltilmesi
4. Alan uzmanı tarafından denetlenmesi
5. Dil uzmanı tarafından son okuma yapılması
6. Son kontrol yapılarak çevirinin onaylanması ve mütalaa adımına (040.00) iletilmesi.

Görüldüğü üzere çeviri, birçok uzmanın katıldığı ve ortak hareket ettikleri bir faaliyet türüdür. TSE bu çalışmaları yönetmek ve gerçekleştirmek üzere TK43 ve TK 44 Tercüme Teknik Komitesi I ve II olmak üzere iki teknik komite oluşturmuştur. Bu komiteler diğer teknik komitelerle birlikte nitelikli çeviri üretmek üzere çalışmaktadır.

6.1 Çeviri sürecinde iş akışı

TSE tarafından benimsenen iş akışı şu şekildedir:

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Çeviri sürecinin birçok aşaması Tercüme Teknik Komiteleri tarafından yerine getirilmektedir. Bu çalışmaya diğer Teknik Komiteler 020.30.04 adımda çevirilerin teknik denetimlerini yapmak suretiyle katılmaktadır. Nitelikli çeviri üretilmesi açısından bu denetim aşaması önem arz etmektedir.

6.2 Çeviri sürecinde uzman denetimi

Çeviri sürecinin aşamada denetçiler çevirinin alan diline ve kullanılan terminolojiye uygunluğunu denetler. Çevirinin, bu aşamaya gelmişse anlam hataları içermediği kabul edilir. Alan uzmanları çevirinin dilinin Türkçede yaygın olarak kullamlan alan diline uygun olup olmadığına ve kullamlan terminolojinin doğru olup olmadığına bakar. Ancak, metin düzeltmeden sonra yeniden çevirmene gideceği için, yapılan düzeltmelerin çevirmen tarafından anlaşılır olması gerekir. Bu nedenle MS Word yazılımında "Gözden geçir" sekmesinin altında yer alan "İzleme" sütunundaki "Değişiklikleri izle" işlevi açık olmalıdır.



Şekil 1 – Değişiklikleri izle işlevi

Denetleme sırasında bütün metin baştan sona gözden geçirilerek bulunan bütün hatalar düzeltilir. Örneğin terminolojide bir hata varsa metnin bir yerinde düzeltme yapıldıktan sonra diğer yerlerdeki düzeltmelerin çevirmen tarafından yapılması beklenmemeli, metnin tamamında hatalı terimlerin

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hepsi düzeltilmelidir. Aksi halde çevirmen herhangi bir terim ile karşılaştığında düzeltme yapılıp yapılmayacağı konusunda karar vermekte güçlük çekebilir.

Çevirmene iletilecek bilgiler "Yeni Açıklama" seçeneğine tıklamak suretiyle açılan pencere içine yazılabilir.

Düzeltme yapılırken TSE Standart Hazırlama Kılavuzu'nda yer alan bilgilerin iyi bilinmesinde yarar bulunmaktadır.

7 Dokümanların ulusal bölümü

Bir yabancı dilden çevirisi yapılmak suretiyle Türk Standardı statüsü kazanan dokümanların ilk bölümü aşağıdaki sayfalardan oluşur:

Türkçe	İngilizce
Ulusal kapak sayfası	National title page
Ulusal önsöz	National foreword
Ulusal ek	National annex

7.1 Ulusal kapak sayfası

Ulusal kapak sayfası MS Word TSE Şablonu ile otomatik olarak üretilir. Ulusal kapak örneği Ek A'da gösterilmiştir.

7.2 Ulusal önsöz

Ulusal önsöz her dokümanda bulunması gereken zorunlu bölümlerdendir. Bu bölümde gerekliliklere, tavsiyelere, şekillere ve çizelgelere yer verilmez. Ulusal önsözde sadece

a) dokümanı hazırlayan sorumlu komitenin adı,

b) dokümanın kabul edilmesine ilişkin bilgi,

c) dokümanın hazırlanmasına katkıda bulunan kuruluşun adı,

d) dokümanın hangi dokümanların yerini aldığına ilişkin bilgi ve

e) dokümanın başka dokümanlarla ilişkisi

yer alır.

Dokümanın başka dokümanlarla ilişkisini belirtmek amacıyla, kaynak dokümanın Bağlayıcı atıflar başlığı altında yer alan dokümanların ulusal karşılıkları bir liste şeklinde gösterilir. Bu listenin başında aşağıdaki ifade yer alır:

"Bu dokümanda Bağlayıcı atıflar maddesi altında yer alan dokümanların ulusal karşılıkları aşağıda verilmiştir:"

Bu ifadeden sonra Bağlayıcı atıflar bölümündeki dokümanların kaynak metindeki standart numaraları ve adları kaynak metindeki şekliyle verilir.

Ulusal önsöz örneği Ek B'de gösterilmiştir.

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7.3 Ulusal ekler

Ulusal ekler NA, NB, ... NZ şeklinde numaralandırılır ve Ulusal önsözden sonra yer alır (Bk. Ek C). Bu ekler yalnızca uygulamayı kolaylaştırıcı bilgiler içerebilir. Bir ulusal ek, çevirisi yapılan standardın herhangi bir hükmünü değiştiremez.

8 Kaynak dokümanın bölümleri

Dokümanlarda yer alan bölümlerin İngilizce ve Türkçe başlıkları şöyledir:

İngilizce	Türkçe
A-deviations	A-sapmalar
Annex	Ek
Annex (informative)	Ek (bilgi için)
Annex (normative)	Ek (bağlayıcı)
Annex NA	Ek NA
Annex ZA	Ek ZA
Bibliography	Kaynaklar
Classification, designation and coding	Sınıflandırma, kısa gösteriliş ve kodlama
Conformance	Uygunluk
Contents	İçindekiler
Foreword	Önsöz
Index	Dizin
Introduction	Giriş
Marking, labelling and packaging	İşaretleme, etiketleme ve ambalajlama
Normative references	Bağlayıcı atıflar
Requirements	Gereklilikler
Sampling	Numune alma
Scope	Kapsam
Symbols and abbreviations	Simgeler ve kısaltmalar
Terms and definitions	Terimler ve tanımlar
Test methods	Deney yöntemleri
Title page	Kapak sayfası

8.1 Kapak sayfası

ISO ya da EN kapak sayfası ilk olarak dokümanın başlığını içerir. Başlık hazırlanırken ve çevrilirken son derece dikkatli olunmalı ve mümkün olduğunca hassas davranılmalıdır. Başlık herhangi bir belirsizliğe yol açmamalı, metnin içeriğini başka metinlerden ayırt edilebilecek ve gereksiz ayrıntıya girilmeyecek şekilde ifade edilmelidir. Ayrıntılar Kapsam maddesi altında verilebilir.

Bağlayıcı dokümanlarda başlık genellikle üç bölümden oluşur:

a) *Giriş bölümü*: Dokümanın hangi genel alanda hazırlandığını bildirir.
b) *Ana bölüm*: Söz konusu genel alanda yer alan standardın asıl konusunu gösterir.

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c) *Tamamlayıcı bölüm*: Dokümanın ana bölümüne ait standardın ele aldığı özel konuyu ifade eder ve dokümanı aynı konudaki diğer dokümanlardan ayırıcı olmalıdır.

Başlıkların hazırlanmasında dikkat edilecek kurallar için bk. IR3 Ek E.

ISO ve EN kapak sayfasında yer alan ifadelerden bazıları şunlardır:

İngilizce	Türkçe
COPYRIGHT PROTECTED DOCUMENT	TELİF HAKKI KORUMALI DOKÜMAN
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Published in Switzerland	İsviçre'de yayımlanmıştır
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ISO copyright office	ISO Telif Hakları Ofisi

8.2 İçindekiler

İçindekiler bölümünün başlığı "İçindekiler" olmalıdır. Bu bölüm ihtiyaca göre birinci, ikinci ve üçüncü düzey başlıkları ile dokümanın ek başlıklarını içerebilir. Eklerde ekin statüsü de belirtilir (bağlayıcı ya da bilgi için şeklinde).

İçindekiler listesi Word dosyalarında otomatik olarak üretilebilecek şekilde hazırlanır, elle oluşturulmaz.

8.3 Önsöz

Avrupa önsözü, CEN tarafından yayımlanan bütün Uluslararası Standartlar'da ve Avrupa Standartları'nda olmak zorundadır. Önsöz genel ve özel olmak üzere iki bölümden meydana gelir. Genel bölüm, standardı hazırlayan kuruluş ve standart hakkındaki standardı hazırlayan komitenin numarası ve adı, oylamayla ilgili bilgiler ile Avrupa Standardı'na uygun ulusal standardın en son yayımlanma tarihi (dop) ve mevcut çelişkili ulusal standartların iptal edilmesinin son tarihi (dow) gibi üst bilgileri içerir.

Önsözün özel bölümünde ise standardın varsa daha önceki sürümleriyle olan farkları belirtilir. Avrupa Standartları'nda ayrıca söz konusu standardın Avrupa mükteseabatı ile olan ilişkisine yer verilir.

İngilizce	Kısaltma	Türkçe
date of publication	dop	yayın tarihi
date of withdrawn	dow	yayından kaldırma tarihi

8.4 Giriş

Giriş maddesinde dokümanın teknik içeriğinin anlaşılabilmesi için gereken bilgiler verilir, gerekirse yorumlar yapılır ve dokümanın hazırlanma gerekçesi açıklanır. Bu maddede gereklilikler yer almaz.

Standartta patent haklarıyla ilgili hususlar tespit edilmişse bu durum Giriş bölümünde açıklanır.

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Giriş maddesinde bölüm numarası verilmez. Ancak alt maddelerin mevcut olması nedeniyle numara verilmesi mutlaka gerekliyse Giriş maddesi 0 ile numaralandırılır ve alt maddelere 0.1, 0.2 gibi numaralar verilir. Girişte yer alan denklem, çizelge, şekil gibi numaralandırılması gereken öğeler 1 ile başlanarak numaralandırılır.

8.5 Kapsam

Standartların ana metni Kapsam maddesi ile başlamak zorundadır. Bu maddede dokümanın konusu açıklanır ve dokümanın tamamen ya da kısmen uygulanması ile ilgili sınırlar belirlenir. Kapsam maddesinde de gereklilikler yer almaz.

Kapsam maddesinin kütüphanecilik hizmetinde de kullanılacağı göz önüne alınarak kısa ve uygun hazırlanmalıdır. Bu nedenle, "...'in ölçülerini", "... yöntemini" ve "...'in özelliklerini belirler" ya da "... için kullanılacak sistem" ve "... için genel ilkeleri gösterir" ya da "... için ilkeleri belirtir" ve "... terimleri tanımlar" gibi ifadeler kullanılabilir.

Hangi ifadelerin nasıl kullanılacağı dokümanın türüne (ör. Uluslararası Standart, Teknik Şartname, Kılavuz Doküman vb.) bağlıdır.

8.6 Bağlayıcı atıflar

Bağlayıcı atıflar maddesinde genellikle kısa bir açıklamadan sonra atıflar listelenir. Listede yer alan standartların numaraları normal yazı tipi, adları ise eğik yazı tipi ile yazılır. Buradaki doküman adları Türkçeye çevrilmez, orijinal dilinde bırakılır (Bk. IR3, Bk. ZC 4). Bu standartların Türkçe karşılıkları, gerekli görülürse Ulusal Önsöz'de gösterilir.

Bağlayıcı atıflar bölümünde kullanılan ifadeler ve Türkçe karşılıkları

EN	The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies
TR	Aşağıdaki kısmen ya da tamamen atıfta bulunulan dokümanlar, bu standardın uygulanması için gereklidir. Tarihli atıflarda, yalnızca alıntı yapılan baskı geçerlidir. Tarihli olmayan dokümanlar için, atıf yapılan dokümanın (tüm tadiller dâhil) sonbaskısı geçerlidir.
EN	all parts
TR	bütün bölümler

8.7 Terimler ve tanımlar

Terimler ve tanımlar maddesi aşağıdaki ifadelerden uygun olanıyla başlar. Bu maddede yaygın olarak kullanılan İngilizce ifadeler ve Türkçe karşılıkları aşağıda verilmiştir:

EN	For the purposes of this document, the following terms and definitions apply.
TR	Bu standardın amaçları doğrultusunda aşağıdaki terimler ve tanımlar geçerlidir.
EN	For the purposes of this document, the terms and definitions given in ... and the following apply.
TR	Bu standardın amaçları doğrultusunda ...de yer alan ve aşağıdaki terimler ve tanımlar geçerlidir.

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Standartlarda kullanılan "Terimler ve tarifler" maddesinin adı "Terimler ve tanımlar" olarak değiştirilmiştir. Bunun nedeni, Arapça kökenli olan "tarif" sözcüğü yerine Türkçe "tanım" sözcüğünün tercih edilmesidir.

Bu bölüm de bir standartta yer alması gereken zorunlu maddelerden biridir. Terimler ve tanımlar maddesinde, söz konusu standartta kullanılan terimlerin doğru anlaşılması için gereken bilgilere yer verilir.

Bu madde tamamen terminoloji sözlüğü (terimlik) oluşturma yaklaşımına göre hazırlanmalıdır. Hazırlanmalıdır denmesinin nedeni, bu bölümde çeviriden çok terminoloji araştırması yapılarak kaynak standartta yer alan kavramların Türkçede hangi belirtimlerle ifade edildiğinin belirlenmesinin gerekli olmasındandır. Bu çalışma sonucunda kaynak metinde tek bir karşılığı olan kavramın Türkçede birden çok karşılığı olabilir ve bunlar da bu maddeye eklenmelidir. Bunun tersi olarak, kaynak dilde birden çok karşılığı bulunan bir kavram Türkçede tek bir terimle de ifade edilebilir, hatta o kavramın Türkçe karşılığı bulunmayabilir. Bu durumda Türkçe terim yerine üç nokta (...) yazılır.

Terminoloji çalışmalarında kullanılan yöntemler TS ISO 704 standardında açıklanmıştır. Standartların bu bölümlerinde yer alan terimler bağımsız terimlik olarak yayımlanabilir ve terminoloji veri tabanlarına kaydedilebilir.

Terimler ve tanımlar maddesinde uyulacak ilkeler şunlardır:

- Bu maddede yer alan numaralar madde numaraları değil, terimlere kolay ulaşılmasını sağlamak üzere kullanılan atıf numaralarıdır ve bu nedenle bunlar standardın İçindekiler listesinde yer almaz.
- Her terim, atıf numarasından sonra gelen satırdan başlanarak ayrı bir satıra yazılır. Terimlerin yazılışındaki büyük ve küçük harf kullanımı terimin cümle içindeki yazılışı gibidir.
- Tanımlar da ayrı bir satırdan başlar ve küçük harfle başlanarak yazılır. Tanımlar tam bir cümle oluşturmadıkları için sonlarına nokta vb. gibi cümlenin bittiğini gösteren noktalama işaretleri konmaz.
- Bir kavramı göstermek için Türkçede birden çok terim varsa, bunlar sıklık sırasına göre yazılır. Kullanılması tavsiye edilen terim en üstte yer alır ve koyu yazılır. Diğer eş anlamlı terimler bunun altında yer alır ve koyu yazılmaz.
- Terimlerin bazılarının artık kullanılmaması isteniyorsa terimden önce "ESKİMİŞ" ifadesi yer alır.

ÖRNEK

3.1.9
bağıl yoğunluk

ESKİMİŞ: özgül ağırlık

- Terimlerin yanına, gerekli görülmesi durumunda dilbilgisi cinsiyeti (eril, dişil), sayısı (tekil, çoğul) ya da sözcük türü (ad, eylem, belirteç) yazılabilir.
- Terimlerin farklı uzmanlık alanlarında farklı anlamları varsa üçgen ayraç (<...>) ile gösterilir.

Terimlerin düzenlenmesi konusunda ayrıntılı bilgi için bk. IR3, Ek D.

8.8 Ekler

Çevirisi yapılan standartlarda iki tür ek yer almaktadır: Bağlayıcı özelliğe sahip ekler ve bilgilendirme amaçlı ekler. Bağlayıcı ekler standardın ana metninde yer alan hükümlere ek ve açıklayıcı hükümler getirmek amacıyla kullanılır. Ekin başlığında ve dokümanın İçindekiler bölümünde eklerin statüsü şu şekilde belirtilir:

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İngilizce	Türkçe
normative	bağlayıcı
informative	bilgi için

Mevcut özel ulusal koşullar bağlayıcı ulusal ek olarak verilmelidir.

Bilgilendirici ekler ise ana metnin anlaşılmasına ya da kullanılmasına yardımcı olacak bilgiler içerir. Bu tür ekler gereklilik içermez.

8.9 Dokümanların diğer maddelerinde karşılaşılan öğeler

8.9.1 Listeler

Listeler düzenlenirken, özellikle büyük ya da küçük harf kullanımı ve liste öğelerinin satır sonlarında kullanılan noktalama işaretlerinde kaynak metne bağlı kalınır.

8.9.2 Çizelgeler

Çizelgelerin düzenlenmesinde kaynak metne bağlı kalınır. Çizelgelerde daha küçük yazı boyutu kullanılır, çizelgenin büyüklüğüne göre 10 ya da 9 nokta boyutunda yazı tipi kullanılabilir.. Ancak 9 noktadan daha küçük yazı boyutu kullanılmaması gerekir.

Çizelgelerde özellikle başlıkların, denklemlerin ve dipnotların yazılışlarına dikkat edilmelidir.

8.9.3 Şekiller

Şekillerin düzenlenmesinde de kaynak metne bağlı kalınır. Şekillerin içinde çevrilmesi gereken yerler grafik düzenleme yapacak kişilere yardımcı olmak amacıyla çevrilmesi gerekir. MS Word dosyasında bu çeviriler "Açıklama" olarak gösterilebilir. Ancak, hiç İngilizce bilmeyen kişilerin de grafik düzenleme yapabilmelerini sağlayacak önlemler alınmalıdır.

8.9.4 Formüller

Formüllerin düzenlenmesinde kaynak metne bağlı kalınır. Formüllerin içinde geçen, simge olmayan ve nicelik belirten ifadeler Türkçeye aktarılır.

İngilizce	Türkçe
max	en çok *veya* en büyük
min	en az *veya* en küçük
year	yıl
day	gün

8.9.5 Sayılar

Sayılarda ondalık haneler virgül ile ayrılır. Binlik haneler boşluk ile ayrılır. TDK kurallarına göre binlik haneler arasına nokta konabilir, ancak yanlış anlamalara ve karışıklığa neden olmaması için TSE tarafından IR3'te yer alan kural kabul edilmiştir.

ÖRNEK 1 18 854

ÖRNEK 2 3,14 159 265

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8.9.6 Kısaltmalar

Kısaltmaların hangilerinin kaynak metindeki gibi bırakılacağı, hangilerinin Türkçeye aktarılacağını söylemek güçtür. Bu konuda kısaltmanın yaygın olarak hangi dilde kullanıldığına bakılarak karar verilir. Yaygın olarak kullanılan kısaltmalar kaynak metinde olduğu gibi yazılır.

Kısaltmalar ek aldıklarında Türkçe okunuşları esas alınır.

ÖRNEKLER 1

50 km/h'e kadar	50 kilometre bölü saate kadar
15 m/min'dan sonra	15 metre bölü dakikadan sonra

ÖRNEKLER 2

HPLC'ye	[High Performance Liquid Chromatography = Yüksek Performanslı Sıvı Kromatografisi]
rms'nin	[root mean square = kare kök ortalama]

9 Yazım kuralları

9.1 Genel kurallar

Bu bölümde yer alan bilgiler, standart hazırlama sürecinde karşılaşılan sorunlarla sınırlı tutulmuştur. Daha geniş bilgi edinilmesi için Türk Dil Kurumu Yazım Kılavuzu'na bakılabilir.

Standart metinlerinde Türk Dil Kurumu (TDK) tarafından belirlenen yazım kurallarına uyulur. Yabancı dille yazılan özel isimler olduğu gibi yazılır.

Kişi, kurum adlarında ya da diğer özel isimlerde gelenekselleşmiş yazım biçimlerinde TDK'ye göre farklı kurallar kullanılabilir.

Yasayla kabul edilmiş bulunan "Türk Standardları Enstitüsü" ile "Standard Hazırlama Merkezi" gibi alt birimlerinin adları dışındaki bütün kullanımlarda standart sözcüğünün son sesi TDK Yazım Kurallarına uyularak "t" harfi ile yazılacaktır.

9.2 Büyük ve küçük harf kullanımı

9.2.1 *Kurum, kuruluş, bölüm, birim, komite, komisyon, delegasyon adları*. Bu tür adlarda bütün sözcüklerin ilk harfi büyük yazılmalıdır.

ÖRNEKLER Türk Standartları Enstitüsü, Uluslararası Standardizasyon Kuruluşu, Avrupa Birliği, Avrupa Kalkınma Fonu, Uluslararası İlişkiler Komitesi Başkan Yardımcısı, Avrupa Birliği Türkiye Delegasyonu

9.2.2 Kitap, gazete, mecmua, eser, kanun, tüzük, yönetmelik, yönerge ve genelge adları büyük harfle başlar.

ÖRNEK 1 Uluslararası Standart, Avrupa Standardı, Türk Standardı

9.2.3 Uluslararası antlaşmalar, anlaşmalar, konferanslar ve sözleşmeler. Bütün sözcüklerin ilk harfleri büyük olmalıdır.

ÖRNEK Avrupa Güvenlik ve İşbirliği Konferansı, Gümrük Tarifeleri ve Ticaret Genel Anlaşması

9.2.4 Standartlarda yer alan *resim, çizelge, şekil* vb.nin altında ya da üstünde yer alan açıklayıcı yazılar büyük harfle başlar. Açıklayıcı yazı, cümle niteliğinde değilse sonuna nokta konmaz.

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ÖRNEK Şekil 5 – Perçinin boyutları

İki noktadan sonra gelen cümleler büyük harfle başlarken, cümle veya özel ad niteliğinde olmayan unsurlar büyük harfle başlamaz.

ÖRNEK 1 Bu eskiliği siz de çok evde görmüşsünüzdür: duvarlarda çiviler, çivi yerleri, lekeler...

ÖRNEK 2 Bu eskiliği siz de çok evde görmüşsünüzdür: Duvarlarda çiviler, çivi yerleri ve lekeler göze çarpar.

9.2.5 *Gezegen ve yıldız adları* büyük harfle başlar.

ÖRNEK 1 Dünya, Güneş, Merkür, Halley.

NOT Dünya, güneş, ay kelimeleri gezegen anlamı dışında kullanıldıklarında küçük harfle başlar.

ÖRNEK 2 güneş paneli, güneş bataryası

9.2.6 Büyük harf kullanımında TDK tarafından belirlenen kurallara uyulmalı, gereksiz yere büyük harf kullanılmamalıdır.

9.3 Birleşik sözcüklerin yazılışı

9.3.1 Genel

Birleşik sözcükler bitişik, ayrı ya da tire ile yazılabilir. Genel olarak TDK yazım kurallarına uyulmakla birlikte sözcüklerin kullanım sıklığı arttıkça tek sözcük olarak yazılma eğilimi de artmaktadır.

ÖRNEK veri tabanı, veri-tabanı, veritabanı.

9.3.2 Ayrı yazılan birleşik sözcükler

9.3.2.1 Birleşik kullanılan kelimelerden herhangi biri ses veya anlam yönünden bir değişikliğe uğramıyorsa ve bir kelimesi tür adıysa ayrı yazılır.

ÖRNEKLER köpek balığı, ağustos böceği, Van kedisi, deve kuşu, ayrık otu, arap sabunu, gök taşı

9.3.2.2 Geniş zaman ortaç ekiyle kurulmuş tamlamalı birleşik kelimeler ayrı yazılır.

ÖRNEKLER tükenmez kalem, uçan daire, çalar saat

9.3.3 Bitişik yazılan birleşik sözcükler

9.3.3.1 Kanunda bitişik geçen veya bitişik olarak tescil ettirilmiş olan kuruluş adları bitişik yazılır:

ÖRNEKLER İçişleri, Dışişleri, Genelkurmay, Yükseköğretim Kurulu, Açıköğretim Fakültesi, Gaziosmanpaşa Üniversitesi

9.3.3.2 Birleşik kullanılan kelimelerden herhangi biri ses veya anlam yönünden bir değişikliğe uğruyorsa ve/veya yeni bir kavrama ad oluyorsa bitişik yazılır.

ÖRNEKLER aslanağzı, balıksırtı, tutkal, cankurtaran, gökdelen, gecekondu

9.3.3.3 Ağırlık ve ölçü birimlerinin adları bitişik yazılır.

ÖRNEKLER kilogram, kilometre, mililitre

9.3.4 TDK Yazım Kılavuzu'na uymayan kullanımlar

TDK Yazım Kılavuzu'nda ayrı yazılmasına rağmen gelenekselleşmeleri nedeniyle TSE tarafından bitişik yazılması benimsenmiş sözcükler şunlardır:

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TDK	TSE
ön söz	önsöz
iş birliği	işbirliği
kara yolu	karayolu
demir yolu	demiryolu
deniz yolu	denizyolu
hava yolu	havayolu

9.4 Ödünçleme sözcüklerin yazılışı

9.4.1 Batı kökenli ödünçleme sözcüklerde yan yana iki ünsüz arasına ünlü getirilmez.

ÖRNEKLER gram, grup, Hristiyan, stil, trafik, film, slayt

9.4.2 Batı kökenli ödünçleme sözcüklerin içindeki ve sonundaki "g" ünsüzü korunur.

ÖRNEKLER program, katalog

NOT Bazı sözcüklerde bu kurala uyulmaz: fotoğraf, coğrafya, topoğraf

9.4.2 Bilim, sanat ve teknik alanlarında kullanılan bazı ödünçleme terimler (tam yerleşmedikleri için) özgün biçimleri ile yazılır.

ÖRNEKLER andante, cuprum, desptyl, quercus, terminus technicus

9.5 Kısaltmaların yazılışı

9.5.1 Ölçü birimlerinde uluslararası kısaltmalar kullanılır:

ÖRNEKLER m, mm, g, cm^2, h (saat), min (dakika), s (saniye), v, w

9.5.2 Kuruluş, ülke, kitap, dergi ve yön adlarının kısaltmaları her kelimenin ilk harfinin büyük olarak yazılmasıyla ve nokta konmadan yapılır.

ÖRNEKLER TSE, ISO, CEN, TBMM, TDK, B (batı), GD (güneydoğu)

NOT Gelenekselleşmiş olan T.C. (Türkiye Cumhuriyeti) ve T. (Türkçe) kısaltmalarına, büyük harfle yazılmalarına rağmen nokta konur.

9.5.3 Kuruluş, kitap, dergi ve yön adlarıyla ölçülerin dışında kalan sözcük veya sözcük gruplarının kısaltılmasında, ilk harfle birlikte kelimeyi oluşturan temel harfler dikkate alınarak özel ad, unvan veya rütbe ise ilk harf büyük; cins isim ise ilk harf küçük olur.

ÖRNEKLER 1 Alm., Güniz Sok., Prof., Alb.

ÖRNEKLER 2 sf. (sıfat), çev. (çeviren), kim. (kimya)

9.6 Kısaltmalara getirilen eklerin yazılışı

9.6.1 Büyük harflerle yapılan kısaltmalara getirilen eklerde ise kısaltmanın son harfinin okunuşu esas alınır.

ÖRNEKLER TSE'ye, ISO'dan, CEN'e, TBMM'nin, TDK'ye

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9.6.2 Kısaltması büyük harflerle yapıldığı hâlde bir sözcük gibi okunan kısaltmalara getirilen eklerde kısaltmanın okunuşu esas alınır.

ÖRNEKLER ASELSAN'a, BOTAŞ'ın

NOT Numara sözünün kısaltması da kelime gibi okunduğundan getirilecek ek de okunuşa göre getirilir.

ÖRNEKLER No.lu, No.suz

9.6.3 Küçük harflerle yapılan kısaltmalara getirilen eklerde kelimenin okunuşu esas alınır.

ÖRNEKLER cm'yi, mm'den, h'te (saatte), min'da (dakikada), kr.un (kuruşun), sf.a(sıfata)

9.6.4 Kimyasal simgelere ek getirilmez, kısaltma yerine açık adları yazılır.

ÖRNEKLER *Au'ya değil **altına**, *Fe'nin değil **demirin**

NOT Gerçek adı bilinemeyen formüllerle karşılaşılması durumunda getirilen ek formülün okunuşuna göre yazılabilir.

ÖRNEK 1 C_2H_6O'ya (Bu kapalı formül gerek etanole (C_2H_5OH) gerekse dimetiletere (CH_3OCH_3) ait olabileceği için adının yazılması mümkün olmayabilir.)

9.7 Sayıların yazılışı

9.7.1 Birden fazla sözcükten oluşan sayılar ayrı yazılır.

ÖRNEKLER saat dokuzu beş geçe, mesela saat onda

Para ile ilgili işlemlerle senet, çek vb. ticari belgelerde geçen sayılar bitişik yazılır.

ÖRNEK 650,35 TL (altıyüzelliTL,otuzbeşkr.)

9.7.2 Yüzde ve binde işaretleri yazılırken sayılarla işaret arasında boşluk bırakılmaz.

ÖRNEK %25, ‰10

NOT Yüzde ve binde işaretinden sonra ayraç varsa işaretle ayraç arasında boşluk bırakılır.

ÖRNEK % (25 ± 5), ‰ (10 ± 1)

9.7.3 Dört veya daha çok basamaklı sayılar sondan sayılmak üzere üçlü gruplara ayrılarak yazılır ve aralarına boşluk bırakılır.

NOT TDK kuralına göre üçlü gruplar arasına nokta konulmasına rağmen IR3'e göre boşluk konması zorunludur.

ÖRNEKLER 4 567, 326 197, 49 750 812

Bu kural virgülle ayrılan kesirler için de geçerlidir.

ÖRNEK 28 434,95 310 547

Üleştirme sayıları rakamla değil yazıyla belirtilir.

ÖRNEK *300'er gramlık yerine **üç yüzer gramlık**

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9.7.4 Sıra sayıları yazıyla ve rakamla gösterilebilir. Rakamla gösterilmesi durumunda ya rakamdan sonra bir nokta konur ya da rakamdan sonra kesme işareti konarak derece gösteren ek yazılır.

ÖRNEKLER 1 15., 19., XX.

ÖRNEKLER 2 15'inci, 19'uncu, XX'nci

9.7.5 Bayağı kesirlere getirilecek ekler, alttaki sayı esas alınarak yazılır.

ÖRNEKLER 1 4/8'i (dört bölü sekizi), 1/2'si (bir bölü ikisi)

9.8 Düzeltme işaretinin kullanılması

9.8.1 Genel

Düzeltme işareti (^) ünlülerin uzun veya ince okunacağını göstermek amacıyla kullanılır.

9.8.2 Yazılışları bir, anlamları ve söylenişleri ayrı olan sözcükleri ayırt etmek amacıyla okunuşları **uzun** olan ünlülerin üzerine konur.

ÖRNEKLER adem (yokluk) / âdem (insan), adet (sayı) / âdet (gelenek, alışkanlık), hala (babanın kız kardeşi) / hâlâ (henüz), şura (şu yer) / şûra (danışma kurulu)

NOT **katil** (< **katl** = öldürme / **ka:til** = öldüren) ve **kadir** (< **kadr** = değer / **ka:dir** = güçlü) sözcüklerinin düzeltme işareti konmadan yazılması yaygınlaşmıştır.

9.8.3 Arapça ve Farsçadan dilimize giren birtakım kelimelerle özel adlarda bulunan **ince** <g>, <k> ünsüzlerinden sonra gelen <a> ve <u> ünlüleri üzerine konur

ÖRNEKLER karargâh, tezgâh, kâğıt, mahkûm, mezkûr, sükût

9.8.4 Nispet ekinin, belirtme durumu ve iyelik ekiyle karışmasını önlemek için kullanılır.

ÖRNEKLER milli (tekerlek) / millî (takım); (Türk) askeri / askerî (okul); (İslam) dini / dinî (bilgiler); (Atatürk'ün) resmi / resmî (kuruluşlar)

10 Noktalama işaretleri

Türkçe metinlerde Türkçe noktalama işaretlerine ait kurallara uyulur. Noktalama işaretlerinden (. / , / ; / : /... / ? / !) sonra mutlaka bir (iki değil) boşluk bırakılır.

10.1 Nokta (.)

1. Cümlenin sonuna konur.

   Cümle üç nokta (...), noktalı kısaltma (vb.) ya da sonunda nokta bulunan bir alıntı ile bitiyorsa ayrıca nokta kullanılması gerekmez.

   ÖRNEK

   Atatürk'e göre: "Türk dili zengin, geniş bir dildir. Her kavramı ifade kabiliyeti vardır. Yalnız onun bütün varlıklarını aramak, bulmak, toplamak, onlar üzerinde çalışmak lazımdır."

2. Rakamları sıralama için kullanılan nokta, rakamlar birden fazla ise ve "virgül", "tire" veya "ve" ile ayrılıyorsa, yalnızca son rakamın sonuna konur.

   ÖRNEKLER

   1, 2 ve 3. Maddeler

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XII – XIV. yüzyıllar arasında

3. Tarihlerin yazılışında gün, ay ve yılı gösteren sayıları birbirinden ayırmak için konur.

ÖRNEKLER

18.11.1969

15.IX.1994

NOT TDK, tarihlerde kesme işaretinin de kullanılabileceğini söylemesine rağmen uluslararası dokümanlarda uygulanan kurallara uyulması açısından TSE, tarihlerde yalnızca nokta kullanımını benimsemiştir.

4. Saat ve dakika bildiren rakamları ayırmak için kullanılır.

ÖRNEK

Toplantı 13.00'te başlayacak.

10.2 Virgül (,)

1. Arka arkaya sıralanan eş görevli kelime ve kelime gruplarının arasına konur.

2. Uzun cümlelerde yüklemden özneyi belirtmek için konur.

3. Cümle içinde ara sözleri veya ara cümleleri ayırmak için ara sözlerin veya ara cümlelerin başına ve sonuna konur.

4. Sayıların yazılışında kesirleri ayırmak için kullanılır.

ÖRNEK

38,6 (otuz sekiz tam, onda altı)

5. Özne olarak kullanıldıklarında bu, şu, o zamirlerinden sonra konur.

10.3 Noktalı virgül (;)

1. Cümle içinde virgüllerle ögeleri birbirinden ayırmak için konur.

ÖRNEK

Erkek çocuklara Doğan, Tuğrul, Aslan; kız çocuklara ise İnci, Çiçek, Gönül adı verilir.

2. Ögeleri arasında virgül bulunan sıralı cümleleri birbirinden ayırmak için konur.

ÖRNEKLER

Sevinçten, heyecandan içim içime sığmıyor; bağırmak, kahkahalar atmak, ağlamak istiyorum.

At ölür, meydan kalır; yiğit ölür, şan kalır. (Atasözü)

3. Eş değer ögeleri arasında virgül bulunan cümlelerde, özneden sonra noktalı virgül konabilir.

ÖRNEK

Ayşe; Ahmet, Canan ve Sevgi'yi yemeğe davet etti.

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10.4 İki nokta (:)

1. Açıklaması yapılacak cümlenin sonuna konur.

   ÖRNEK

   Türklerin kullandığı başlıca alfabeler şunlardır: Köktürk alfabesi, Arap alfabesi, Latin alfabesi.

2. Genel Ağ adreslerinde kullanılır.

   ÖRNEK

   http://www.tse.org.tr

3. Matematikte bölme işareti olarak kullanılır.

   ÖRNEKLER

   56 : 8 = 7

   100 : 2 = 50

10.5 Üç nokta (...)

Alıntılarda başta, ortada ve sonda alınmayan kelime veya bölümlerin yerine konur.

ÖRNEK

... derken şehrin öte başından boğuk boğuk sesler gelmeye başladı... (Tarık Buğra)

NOT Ünlem ve soru işaretinden sonra üç nokta yerine iki nokta konur.

10.6 Soru işareti (?)

Bilinmeyen, kesin olmayan veya şüpheli durumlar için kullanılır.

ÖRNEK

Yunus Emre (1240 ?-1320), (Doğum yeri: ?)

10.7 Kısa çizgi (-)

1. Cümle içinde ara sözleri veya ara cümleleri ayırmak için ara sözlerin veya ara cümlelerin başına ve sonuna konur.

   ÖRNEK

   Küçük bir sürü –dört inekle birkaç koyun- yolun ortasında duruyordu.

   NOT Ara söz veya ara cümlelere bitişik yazılır.

2. Arasında, ve, ile anlamlarını vermek için kelimeler veya sayılar arasında kullanılır.

   ÖRNEKLER

   Aydın-İzmir yolu
   Türk-Alman ilişkileri
   09.30-10.30
   Manas Destanı'nda soy-dil-din üçgeni

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1914-1918 Birinci Dünya Savaşı

Türkçe-Fransızca Sözlük

NOT Her iki yanındaki ögeye bitişik yazılır.

3. Matematikte çıkarma işareti olarak kullanılır.

ÖRNEK

50-20=30

4. Sıfırdan küçük değerleri göstermek için kullanılır.

ÖRNEK

-2 °C

NOT Kısa çizgiden başka N çizgi ve M çizgi diye adlandırılan daha uzun çizgiler mevcuttur. Bunların kullanım yerleri ayrıdır.

10.8 Eğik çizgi (/)

1. Adreslerde, apartman numarası ile daire numarası arasına ve semt ile şehir arasına konur.

ÖRNEK

Altay Sokağı No.: 21/6 Kurtuluş / ANKARA

2. Genel Ağ adreslerinde kullanılır.

ÖRNEK

http://www.tse.org.tr

3. Matematikte bölme işareti olarak kullanılır.

70/2=35

4. Fizik, matematik vb. alanlarda birimler arası orantıları gösterirken kullanılır.

g/s (gram/saniye)

5. Seçenekler arasına konur. (TSE)

ve/veya

NOT Her iki yanındaki ögeye bitişik yazılır. (TSE)

10.9 Çift tırnak (“ ”)

1. Başka bir kimseden veya yazıdan olduğu gibi aktarılan sözler tırnak içine alınır.

ÖRNEK

Türk Dil Kurumu binasının yan cephesinde Atatürk'ün “Türk dili, Türk milletinin kalbidir, zihnidir.” sözü yazılıdır.

NOT Tırnak içindeki alıntının sonunda bulunan noktalama işareti, tırnak içinde kalır.

ÖRNEK

“İzmir üzerine dünyada bir şehir daha yoktur!” diyorlar. (Yahya Kemal Beyatlı)

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2. Özel olarak vurgulanmak istenen sözler tırnak içine alınır.

ÖRNEK
Yeni bir "barış taarruzu" başladı.

3. Cümle içerisinde eserlerin ve yazıların adları ile bölüm başlıkları tırnak içine alınır.

ÖRNEK
"Yazım Kuralları" bölümünde bazı uyarılara yer verilmiştir.

NOT 1 Cümle içerisinde özel olarak belirtilmek istenen sözler, kitap ve dergi adları ve başlıkları tırnak içine alınma yerine, eğik yazıyla da gösterilebilir.

ÖRNEK
Höyük sözü Anadolu'da *tepe* olarak geçer.

NOT 2 Tırnak içine alınan sözlerden sonra gelen ekleri ayırmak için ayrıca kesme işareti kullanılmaz.

ÖRNEK
Elif Şafak'ın "Bit Palas"ını okudunuz mu?

NOT 3 Çevirilerde, kaynak dil ile hedef dil arasındaki tırnak işareti farklılığı dikkate alınmalıdır.

Bu, Türkçe "çift tırnak" örneğidir.
Bu, Almanca „çift tırnak" örneğidir.
Bu, Fansızca « çift tırnak » örneğidir.
Bu, İngilizce "çift tırnak" örneğidir.

10.10 Tek tırnak (')

Çift Tırnak içinde verilen cümlenin içinde yeniden tırnağa alınması gereken bir sözü, ibareyi belirtmek için kullanılır.

ÖRNEK
Edebiyat öğretmeni "Şiirler içinde 'Han Duvarları' gibisi var mı?" dedi ve Faruk Nafiz'in bu güzel şiirini okumaya başladı.

NOT Çevirilerde, kaynak dil ile hedef dil arasındaki tek tırnak işareti farklılığı dikkate alınmalıdır.

10.11 Yay ayraç ( )

1. Cümledeki anlamı tamamlayan ve cümlenin dışında kalan ek bilgiler için kullanılır. Yay ayraç içinde bulunan ve yargı bildiren anlatımların sonuna uygun noktalama işareti konur.

ÖRNEK
Anadolu kentlerini, köylerini (Köy sözünü de çekinerek yazıyorum.) gezsek bile görmek için değil, kendimizi göstermek için geziyoruz. (Nurullah Ataç)

2. Alıntıların aktarıldığı eseri, yazarı veya künye bilgilerini göstermek için kullanılır.

ÖRNEK
Bir isim kökü, gerektiğinde çeşitli eklerle fiil kökü durumuna getirilebilir (Zülfikar 1991: 45).

3. Özel veya cins isme ait ek, ayraçtan önce yazılır:

ÖRNEK

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Yunus Emre'nin (1240?-1320) ...

İmek fiilinin (ek fiil) geniş zamanı şahıs ekleriyle çekilir.

4. Alıntılarda, alınmayan kelime veya bölümlerin yerine konan üç nokta, yay ayraç içine alınabilir.

ÖRNEK

Bir isim kökü, gerektiğinde (...) fiil kökü durumuna getirilebilir (Zülfikar 1991: 45).

5. Bir bilginin kesin olmadığını veya şüphe duyulduğunu göstermek için kullanılan soru işareti, yay ayraç içine alınır.

ÖRNEK

1496 (?) yılında doğan Fuzuli ...

6. Bir yazının maddelerini gösteren sayı ve harflerden sonra kapama ayracı konur.

ÖRNEKLER

I), 1), A), a)

II), 2), B), b)

NOT Ayraçtan sonra gelen ek, ayraçtan önceki kelime veya rakama göre getirilir. (TSE)

ÖRNEK

Madde 11 (2)'e göre düzenlenmiştir.

10.12 Köşeli ayraç ([ ])

1. Ayraç içinde ayraç kullanılması gereken durumlarda, yay ayraçtan önce köşeli ayraç kullanılır.

ÖRNEK

Halikarnas Balıkçısı [Cevat Şakir Kabaağaçlı (1886-1973)] en güzel eserlerini Bodrum'da yazmıştır.

2. Metin aktarmalarında, çevirilerde, alıntılarda çalışmayı yapanın eklediği sözler için kullanılır.

ÖRNEK

"Eldem, Osmanlıda en önemli fark[ın], mezartaşının şeklinde ortaya çık[tığını] söyledikten sonra..." (Hilmi Yavuz)

3. Kaynak olarak verilen kitap veya makalelerin künyelerine ilişkin ayrıntılar için kullanılır.

ÖRNEK

Reşat Nuri [Güntekin], Çalıkuşu, Dersaadet, 1922.

10.13 Kesme işareti (')

1. Özel adlara ekler, kesme işaretiyle ayrılır.

ÖRNEKLER

Kurtuluş Savaşı'nı
Türkiye'mizin
Ahmet Cevat Emre'dir
Alman'sınız
Çanakkale Boğazı'nın

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Resmî Gazete'de
Telif Hakkı Yayın ve Satış Yönetmeliği'ni
Batı'da yeni terimler üretiliyor.
1920 Nisan'ın 23'ünde Cumhuriyet ilan edildi.

2. Kısaltmalara getirilen ekler kesme işaretiyle ayrılır.

ÖRNEKLER

TSE'nin
T.C.'den
TV'ye

3. Sayılara getirilen ekler kesme işaretiyle ayrılır.

ÖRNEKLER

1985'te
1'inci madde
2'nci kat
7,65'lik

4. Belirli bir tarih bildiren ay ve gün adlarına getirilen ekler kesme işaretiyle ayrılır.

ÖRNEK

Başvurular 17 Aralık'a kadar sürecektir.

5. Bir ek veya harften sonra gelen ekler kesme işaretiyle ayrılır.

ÖRNEKLER

a'dan z'ye kadar
Türkçede -lık'la yapılmış sözler.

NOT 1 Özel adlar için yay ayraç içinde açıklama yapıldığında kesme işareti yay ayraçtan önce kullanılır.

Yunus Emre'nin (1240?-1320)

ÖRNEK

Yakup Kadri'nin (Karaosmanoğlu)

NOT 2 Sonunda 3. tekil kişi eki olan özel ada, başka bir iyelik eki daha eklendiğinde kesme konmaz.

ÖRNEKLER

Boğaz Köprüsü – Boğaz Köprümüzün güzelliği
Kuşadası – Kuşadamızdaki liman

NOT 3 Kurum, kuruluş, kurul, birleşim, oturum ve iş yeri adlarına kelen ekler kesmeyle ayrılmaz.

ÖRNEKLER

Türkiye Büyük Millet Meclisine
Hacettepe Üniversitesinin
Türk Standardları Enstitüsünden
Birinci Oturumda

NOT 4 Ek getirildiğinde Avrupa Birliği, kesme işareti ile kullanılır.

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ÖRNEK

Avrupa Birliği'ne üye ülkeler...

NOT 5 Standart, Tüzük, Direktif, Yönetmelik, Teknik Şartname adları kesme ile ayrılmaz. (TSE)

NOT 6 Başbakanlık, Rektörlük vb. sözler ünlüyle başlayan bir ek geldiğinde söz sonundaki sert ünsüz yumuşar.

Başbakanlığa,
Rektörlüğe

NOT 7 Özel adlara getirilen yapım ekleri, çokluk eki ve bunlardan sonra gelen diğer ekler kesmeyle ayrılmaz.

ÖRNEKLER

Avrupalılaşmak
Ankaralı
Ayşeler
Türklük
Türkçe
Türklerin
Türklüğün

NOT 8 Özel adlar yerine kullanılan "o" adılı, cümle içinde büyük harfle başlamaz ve ekleri kesmeyle ayrılmaz.

NOT 9 Büyük harflerle yapılan kısaltmalara getirilen ve kesme işaretiyle ayrılan ekler son harfin okunuşuna göre yazılır (bk. Yazım Kuralları, Kısaltmalara Getirilen Ekler).

ÖRNEKLER

TBMM'nin
TSE'nin
TC'den
TV'ye

NOT 10 Küçük harflerle yapılan kısaltmalara getirilen ve kesme işaretiyle ayrılan ekler kelimenin okunuşuna göre yazılır (bk. Yazım Kuralları, Kısaltmalara Getirilen Ekler).

11 Sık kullanılan kısaltmalar

EN Kısaltma	TR Kısaltma	Açık yazılışı	Açıklama
CEN	CEN	Avrupa Standardizasyon Komitesi	
CENELEC	CENELEC	Avrupa Elektroteknik Standardizasyon Komitesi	
e.g.	ör.	örneğin	
EC	AT	Avrupa Topluluğu	
EN	EN	Avrupa Standardı	
f	f	dişil	Dil bilgisi
IEC	IEC	Uluslararası Elektroteknik Komisyonu	
ISO	ISO	Uluslararası Standardizasyon	

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EN Kısaltma	TR Kısaltma	Açık yazılışı	Açıklama
		Kuruluşu	
km/h	km/h	kilometre bölü saat	
m	m	eril	Dil bilgisi
max	–	en çok *veya* en yüksek	
min	–	en az *veya* en düşük	
n	n	nesne	Dil bilgisi
OJ	ABRG ATRG	Avrupa Birliği Resmî Gazetesi Avrupa Topluluğu Resmî Gazetesi	01 Şubat 2003'ten sonra 01 Şubat 2003'ten önce
p.	s.	sayfa	
pl	çğl.	çoğul	Dil bilgisi
see	bk.	bakınız	
sg	tkl.	tekil	Dil bilgisi

12 Sık kullanılan ifadelerin çevirisi

İngilizce	Türkçe
adaptation	uyarlama
A-deviations	A-sapmalar
all parts	bütün bölümler
All rights reserved.	Tüm hakları saklıdır.
amendment	değişiklik
Annex	Ek
Annex (informative)	Ek (bilgi için)
Annex (normative)	Ek (bağlayıcı)
Annex NA	Ek NA
Annex ZA	Ek ZA
article	madde
Bibliography	Kaynaklar
CEN/CENELEC Workshop Agreement	CEN/CENELEC Çalıştay Anlaşması
Classification, designation and coding	Sınıflandırma, kısa gösteriliş ve kodlama
clause	madde
Conformance	Uygunluk
Contents	İçindekiler
COPYRIGHT PROTECTED DOCUMENT	TELİF HAKKI KORUMALI DOKÜMAN
corrigendum	düzeltme
date of publication	yayın tarihi
date of withdrawn	yayından kaldırma tarihi
definition	tanım
Department	Grup Başkanlığı

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İngilizce	Türkçe
directive	direktif; yönetmelik
Draft Turkish Standard	Türk Standardı Tasarısı
endorsement notice	onay bildirimi
English Version	İngilizce Sürümü
equivalent	eş değer
European Committee for Electrotechnical Standardization	Avrupa Elektroteknik Standardizasyon Komitesi
European Committee for Standardization	Avrupa Standardizasyon Komitesi
European Standard	Avrupa Standardı
Foreword	Önsöz
Guide	Kılavuz Doküman
harmonization	uyumlulaştırma
Harmonization Document	Uyumlulaştırma Dokümanı
Index	Dizin
International Electrotechnical Commission	Uluslararası Elektroteknik Komisyonu
International Organization for Standardization	Uluslararası Standardizasyon Kuruluşu
International Standard	Uluslararası Standart
Introduction	Giriş
ISO copyright office	ISO Telif Hakları Ofisi
identical	özdeş
informative	bilgilendirici
international standard	uluslararası standart
Marking, labelling and packaging	İşaretleme, etiketleme ve ambalajlama
national	ulusal önsöz
National annex	Ulusal ek
National foreword	Ulusal önsöz
National title page	Ulusal kapak sayfası
normative	bağlayıcı
Normative references	Bağlayıcı atıflar
page	sayfa
Part	Bölüm
point	bent
Printed in Switzerland	İsviçre'de basılmıştır
publication	yayın
Publicly Available Specification	Kamuya Açık Şartname
publish	yayımlamak
Published in Switzerland	İsviçre'de yayımlanmıştır
publishing	yayın

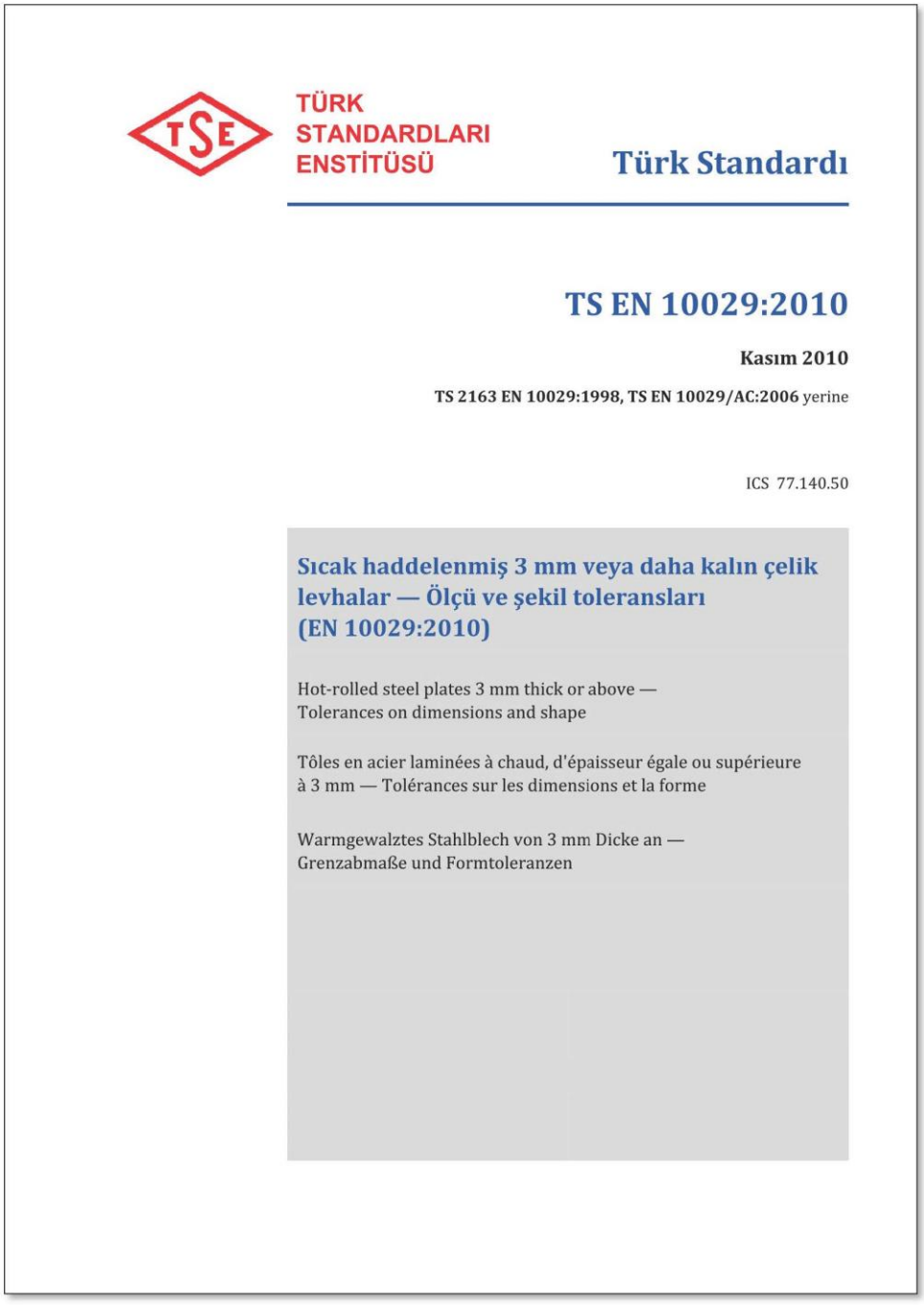
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İngilizce	Türkçe
regulation	tüzük
regulations	tüzük
requirement	gereklilik
Requirements	Gereklilikler
Sampling	Numune alma
Scope	Kapsam
standard	standart (-d)
Standards Development Center	Standart Hazırlama Merkezi Başkanlığı
subclause	alt madde
Superseedes EN xxxx:yyyy	EN xxxx:yyyy yerine
Symbols and abbreviations	Simgeler ve kısaltmalar
Technical Report	Teknik Rapor
Technical Specification	Teknik Şartname
Terms and definitions	Terimler ve tanımlar
Test methods	Deney yöntemleri
Title page	kapak sayfası
Turkish Standard	Türk Standardı
Turkish Standards Institution	Türk Standardları Enstitüsü

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EK A
(bilgi için)

Ulusal kapak örneği



TÜRK
STANDARDLARI
ENSTİTÜSÜ

Türk Standardı

TS EN 10029:2010

Kasım 2010

TS 2163 EN 10029:1998, TS EN 10029/AC:2006 yerine

ICS 77.140.50

Sıcak haddelenmiş 3 mm veya daha kalın çelik levhalar — Ölçü ve şekil toleransları (EN 10029:2010)

Hot-rolled steel plates 3 mm thick or above — Tolerances on dimensions and shape

Tôles en acier laminées à chaud, d'épaisseur égale ou supérieure à 3 mm — Tolérances sur les dimensions et la forme

Warmgewalztes Stahlblech von 3 mm Dicke an — Grenzabmaße und Formtoleranzen

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EK B
(bilgi için)

Ulusal önsöz örneği

Millî önsöz

Bu standart; kaynağı EN 9459-5:2007 standardı olan TS EN 9459-5:2015-08 Türk Standardının Makina İhtisas Kuruluna bağlı TK21 Tesisat, Isıtma, Soğutma ve Havalandırma Teknik Komitesi tarafından hazırlanan Türkçe tercümesidir.

Bu standart yayımlandığında TS EN 9459-5:2015-08 standardının yerini alır.

CEN resmî dillerinde yayımlanan diğer standard metinleri ile aynı haklara sahiptir.

Bu standartta kullanılan bazı kelime ve/veya ifadeler patent haklarına konu olabilir. Böyle bir patent hakkının belirlenmesi durumunda TSE sorumlu tutulamaz.

Bu standartta atıf yapılan standartların millî karşılıkları aşağıda verilmiştir.

EN, ISO, IEC vb. No	TS No	Adı
ISO 9060	TS ISO 9060	*Güneş enerjisi — Güneş enerjisi yarı küresel ve direkt güneş ışınımının ölçülmesi için kullanılan ölçme cihazları özellikler ve sınıflandırma*
ISO 9459-1	TS ISO 9459-1	*Güneş enerjisiyle ısıtma — Konut su ısıtma sistemleri — Bölüm 1: İç ortam deney metotları kullanılarak performans değerlendirme işlemi*
ISO 9459-2	TS ISO 9459-2	*Güneş enerjisi — Konut su ısıtma sistemleri — Bölüm 2: Sadece güneş enerjili sistemlerin yıllık performans tahmini ve sistem performans karakteristikleri için dış ortam deney metodu*
ISO 9488:1999	TS ISO 9488:1999	*Güneş enerjisi — Terimler ve tarifler*
ISO 9846	TS 5320 ISO 9846	*Güneş enerjisi — Pirheliyometre kullanılarak bir piranometrenin kalibrasyonu*

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EK C
(bilgi için)

Ulusal ek örneği

Ek NA
(bağlayıcı)

Millî ek

NA.1 Pompaların işaretlenmesi

Dizel otomotiv yakıtlarının dağıtım birimleri üzerine 10 cm x 30 cm boyutlarından küçük olmamak üzere "Motorin" yazısı yazılmalı veya bu ibareyi taşıyan levha asılmalıdır.

Tüketicilere metalik katkılı dizel yakıtın sunulduğu pompalarda, açıkça görülebilir bir konumda (10 x 30) cm'den küçük olmamak üzere, "Metalik katkı maddeleri içerir" ibaresi yer almalı veya bu ibareyi taşıyan bir levha asılmalıdır.

NA.2 İklime bağlı özellikler

Türkiye için Çizelge 2'de belirtilen tiplerden Tip A yaz mevsiminde, Tip E kış mevsiminde kullanılacaktır.

Bu standardın uygulanması ile ilgili olarak yaz ve kış mevsiminin başlangıç ve bitiş tarihleri aşağıda verilmiştir.

Yaz : 1 Nisan - 31 Ekim (± 15 gün)

Kış : Yaz dönemi dışında kalan dönem

NA.3 Numune alma

Numune alma işlemlerinde, bu standartta belirtilenlerin dışında aşağıdaki standartlardan da yararlanılabilir:

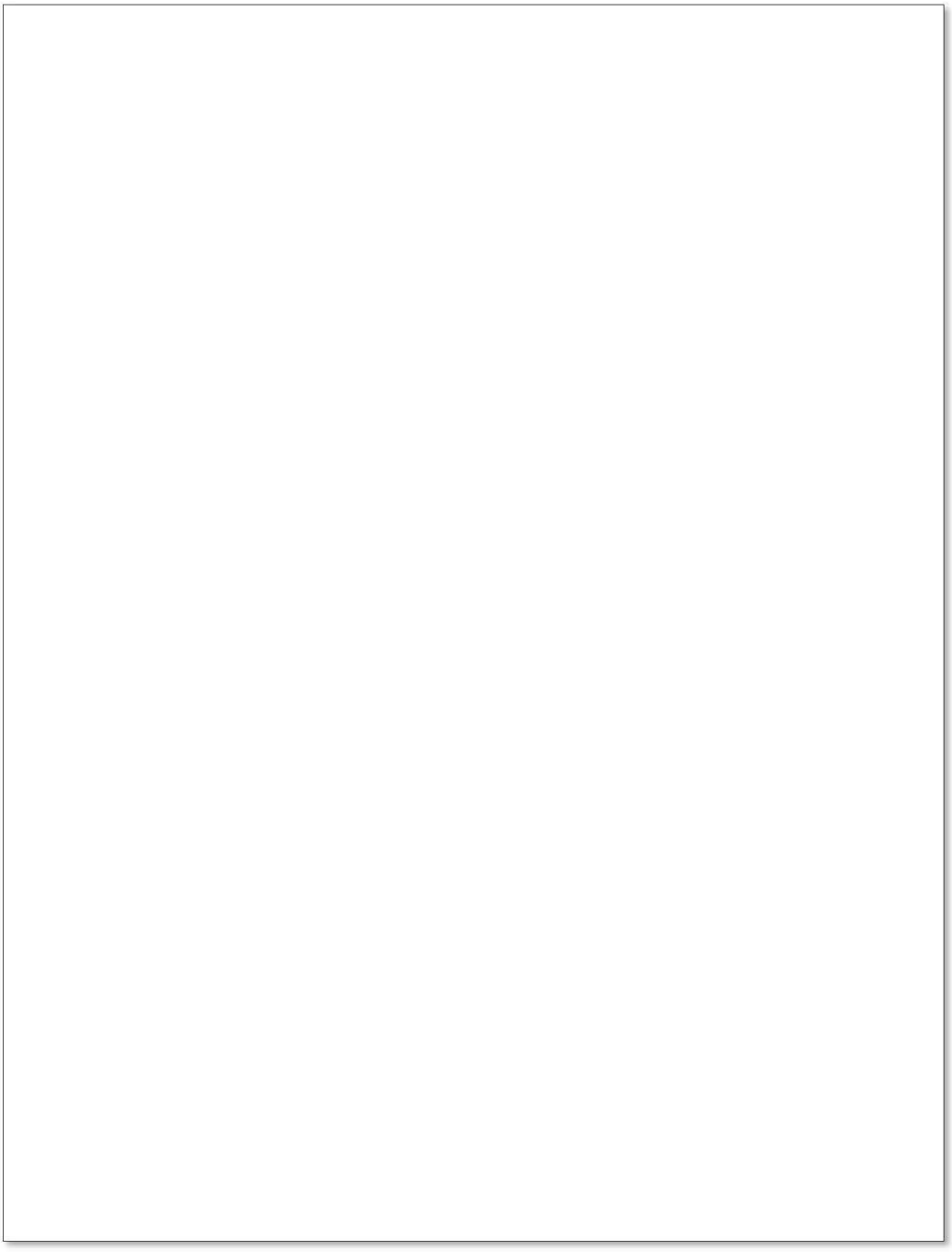
- TS EN 14275 Otomotiv yakıtları – Benzin ve motorin kalitesinin değerlendirilmesi – Perakende ve özel amaçlı akaryakıt dağıtım birimlerinden numune alma.
- TS 13316 Numune kapları – Ham petrol, akaryakıt ve madenî yağlar için – Numunenin muhafaza edilmesi ve taşınması amacıyla kullanılan.

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EK D
(bilgi için)

Bağlayıcı atıflar örneği



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Dizin

A

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article, 3.2

Avrupa Çalıştay Anlaşması, 2.9

Avrupa Standardı, 2.3

B

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bağlayıcı doküman, 3.1

birleşik sözcüklerin yazılışı, 9.3

büyük ve küçük harf kullanımı, 9.2

C

CWA, *Bk. Avrupa Çalıştay Anlaşması*

Ç

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Çeviri Türk Standardı, 3.4.3

Çeviri Türk Standartları, 6

çizelgeler, 8.9.2

D

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Department, 3.2

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dokümanların ulusal bölümü, 7

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E

Ekler bölümü, 8.8

EN, *Bk. Avrupa Standardı*

F

formüller, 8.9.4

G

Giriş bölümü, 8.4

H

HD, *Bk. Uyumlulaştırma Dokümanı*

İ

İçindekiler bölümü, 8.2

K

Kamuya Açık Şartname, 2.8

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Kapsam bölümü, 8.5

Kılavuz Doküman, 2.7

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kısaltmaların yazılışı, 9.5

kural standardı, 4.3

L

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M

may not *çevirisi*, **1.1**

must *çevirisi*, **1.1**

N

Noktalama işaretleri, 10

Ö

Önsöz bölümü, 8.3

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Özdeş Türk Standardı, 3.4.2
Özdeş Türk Standartları, 5
Özgün Türk Standardı, 3.4.1
Özgün Türk Standartları, 4

P

PAS, Bk. Kamuya Açık Şartname

R

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S

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sayıların yazılışı, 9.7
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shall not *çevirisi*, **1.1**
should *çevirisi*, **1.1**
should not *çevirisi*, **1.1**
standardizasyon kuruluşları, 3.3
standart, 2.1
standart hazırlama süreçleri, 3.4

Ş

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T

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Teknik Rapor, 2.6
Teknik Şartname, 2.5
Terimler ve tanımlar bölümü, 8.7
TR, *Bk. Teknik Rapor*
TS, *Bk. Teknik Şartname*

U

ulusal ekler, 7.3
ulusal kapak sayfası, 7.1
ulusal önsöz, 7.2
Uluslararası Standart, 2.2
Uyumlulaştırma Dokümanı, 2.4
uzman denetimi, 6.2

Ü

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Y

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APPENDIX 3

ORIGINALITY REPORT

HACETTEPE ÜNİVERSİTESİ
SOSYAL BİLİMLER ENSTİTÜSÜ
YÜKSEK LİSANS/DOKTORA TEZ ÇALIŞMASI ORJİNALLİK RAPORU

HACETTEPE ÜNİVERSİTESİ
SOSYAL BİLİMLER ENSTİTÜSÜ
İNGİLİZCE MÜTERCİM TERCÜMANLIK ANABİLİM DALI BAŞKANLIĞI'NA

Tarih: 10/01/2018

Tez Başlığı / Konusu: **İnşaat Alanındaki İngilizceden Türkçeye Çevrilmiş TSE Standartlarının Çeviri Kalitesinin Değerlendirilmesi: Skopos Kuramı Işığı Altında Komisyonun Etkisinin İncelenmesi**

Yukarıda başlığı/konusu gösterilen tez çalışmamın a) Kapak sayfası, b) Giriş, c) Ana bölümler ve d) Sonuç kısımlarından oluşan toplam 135 sayfalık kısmına ilişkin, 10/01/2018 tarihinde şahsım/tez danışmanım tarafından Turnitin adlı intihal tespit programından aşağıda belirtilen filtrelemeler uygulanarak alınmış olan orijinallik raporuna göre, tezimin benzerlik oranı % 10'dur.

Uygulanan filtrelemeler:
1- Kabul/Onay ve Bildirim sayfaları hariç,
2- Kaynakça hariç
3- Alıntılar hariç
4- 5 kelimeden daha az örtüşme içeren metin kısımları hariç

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10/01/2018

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Doç. Dr. Elena ANTONOVA ÜNLÜ

HACETTEPE UNIVERSITY
GRADUATE SCHOOL OF SOCIAL SCIENCES
THESIS/DISSERTATION ORIGINALITY REPORT

HACETTEPE UNIVERSITY
GRADUATE SCHOOL OF SOCIAL SCIENCES
TO THE DEPARTMENT OF TRANSLATION AND INTERPRETING

Date: 10/01/2018

Thesis Title / Topic: **Translation Quality Assessment of TSE Standards in the Field of Construction Translated from English into Turkish: Examining the Effect of Commission in the Light of Skopos Theory**

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ADVISOR APPROVAL

APPROVED.

Assoc. Prof. Dr. Elena ANTONOVA ÜNLÜ

Translation Quality Assessment of TSE Standards in the Field of Construction Translated from English into Turkish: Examining the Effect of Commission in the Light of Skopos Theory

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APPENDIX 4

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SOSYAL BİLİMLER ENSTİTÜSÜ
TEZ ÇALIŞMASI ETİK KURUL İZİN MUAFİYETİ FORMU

HACETTEPE ÜNİVERSİTESİ
SOSYAL BİLİMLER ENSTİTÜSÜ
İNGİLİZCE MÜTERCİM TERCÜMANLIK ANABİLİM DALI BAŞKANLIĞI'NA

Tarih: 10/01/2018

Tez Başlığı / Konusu: **İnşaat Alanındaki İngilizceden Türkçeye Çevrilmiş TSE Standartlarının Çeviri Kalitesinin Değerlendirilmesi: Skopos Kuramı Işığı Altında Komisyonun Etkisinin İncelenmesi**

Yukarıda başlığı/konusu gösterilen tez çalışmam:

1. İnsan ve hayvan üzerinde deney niteliği taşımamaktadır,
2. Biyolojik materyal (kan, idrar vb. biyolojik sıvılar ve numuneler) kullanılmasını gerektirmemektedir.
3. Beden bütünlüğüne müdahale içermemektedir.
4. Gözlemsel ve betimsel araştırma (anket, ölçek/skala çalışmaları, dosya taramaları, veri kaynakları taraması, sistem-model geliştirme çalışmaları) niteliğinde değildir.

Hacettepe Üniversitesi Etik Kurullar ve Komisyonlarının Yönergelerini inceledim ve bunlara göre tez çalışmamın yürütülebilmesi için herhangi bir Etik Kuruldan izin alınmasına gerek olmadığını; aksi durumda doğabilecek her türlü hukuki sorumluluğu kabul ettiğimi ve yukarıda vermiş olduğum bilgilerin doğru olduğunu beyan ederim.

Gereğini saygılarımla arz ederim.

Betül K.

10/01/2018

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HACETTEPE UNIVERSITY
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ETHICS BOARD WAIVER FORM FOR THESIS WORK

HACETTEPE UNIVERSITY
GRADUATE SCHOOL OF SOCIAL SCIENCES
TO THE DEPARTMENT PRESIDENCY OF TRANSLATION AND INTERPRETING

Date: 10/01/2018

Thesis Title / Topic: **Translation Quality Assessment of TSE Standards in the Field of Construction Translated from English into Turkish: Examining the Effect of Commission in the Light of Skopos Theory**

My thesis work related to the title/topic above:

1. Does not perform experimentation on animals or people.
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10/01/2018

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