



Article

# The readability of international illustration of auditor's report: An advanced reflection on the compromise between normative principles and linguistic requirements



Mondher Fakhfakh\*

Faculty of Economic Sciences and Management, University of Sfax, TUNISIA

ARTICLE INFO

Article history:

Received 30 January 2014  
Received in revised form 18 February 2015  
Accepted 23 February 2015

Keywords:

Auditing  
International auditors' reports  
ISA 700  
Content of audits  
Understandability  
Readability and determinants of legibility

ABSTRACT

The independent auditors periodically publish reports that summarize the audit results. These reports reinforce the financial communication and reliability of accounting information. International Standards on Auditing (ISA) determine the content of audit reports and the quality of audit results. Theoretically, the audit standardization must model intelligible and clear reports for readers. Compliance with linguistic principles contributes to the improvement of the structure of audit reports. In practice, the effectiveness of these reports is criticized because users do not understand the audit information. In order to improve the content of audit reports, International Federation of Accountants (IFAC) had revised International Standards on Auditor's report: ISA 700: Forming an opinion and reporting on financial statements. Linguistically, standardized audit reports could be unreadable by many users of financial statements. This article discusses the linguistic problems related to the preparation of reports. This discussion focuses on the audit reports which are illustrated by the International Standards on Auditing. The results show that in the presence of conflicting requirements (auditing standards versus linguistic principles), independent auditors must optimize the presentation of their reports.

© 2014 Universidad ESAN. Published by Elsevier España, S.L.U. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

## Legibilidad de la ilustración internacional de los informes de auditoría: una reflexión avanzada sobre el compromiso entre los principios normativos y los requisitos lingüísticos

R E S U M E N

Los auditores independientes publican periódicamente informes que resumen los resultados de la auditoría. Dichos informes refuerzan la comunicación financiera y la fiabilidad de la información contable. Las Normas Internacionales de Auditoría (NIA) determinan el contenido de los informes de auditoría y la calidad de los resultados. En teoría, la estandarización auditora debe modelar unos informes que sean inteligibles y claros para los lectores. El cumplimiento de los principios lingüísticos contribuye a la mejora de la estructura de los informes de auditoría. En la práctica, se critica la efectividad de dichos informes porque los usuarios no comprenden la información auditora. A fin de mejorar el contenido de estos informes, la Federación Internacional de Contables (IFAC) ha revisado las Normas Internacionales sobre Informes de Auditoría, ISA 700: Establecimiento de una opinión y reporte de informes financieros. Lingüísticamente, los informes de auditoría podrían resultar ilegibles para muchos usuarios de informes financieros. Este artículo trata sobre los problemas lingüísticos relacionados con la elaboración de los mismos. Dicho tratamiento se centra en los informes de auditoría que son ilustrados por las Normas

Palabras clave:

Auditoría  
Informes internacionales de auditoría  
ISA 700  
Contenido de la auditoría  
Comprensión  
Legibilidad y determinantes de la legibilidad

\* Corresponding author.

E-mail address: [mondher.fakhfakh@laposte.net](mailto:mondher.fakhfakh@laposte.net)

Internacionales sobre Auditoría. Los resultados reflejan que en presencia de requisitos conflictivos (normas de auditoría frente a principios lingüísticos), los auditores independientes deben optimizar la presentación de sus informes.

© 2014 Universidad ESAN. Publicado por Elsevier España, S.L.U. Este es un artículo Open Access bajo la licencia CC BY-NC-ND (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

## 1. Introduction

Independent auditors prepare periodic reports that communicate several audit information. Audit professionals produce texts that summarize the work of control and audit results. Several empirical studies have shown that the reports of the independent financial auditors are not understood by many readers of the financial statements (Barnett & Leoffler, 1979; Hay, 1998 and Fakhfakh, 2013). In addition, accounting research has discussed the problem of expectation gap which results from the misunderstanding of the significance and the direction of the audit opinion formulations. This misunderstanding was empirically confirmed by several studies that underlined the interpretations heterogeneity of the accounting reports by the internal and external stakeholders (Holt & Moizer, 1990; Gonthier, 1996; and Hatherly, Innes, & Brown, 1997).

Readability of audit reports is a language feature that determines the quality of financial information. As a linguistic measure, readability tests the performance of the written information and the effectiveness of instruments of financial communication. Previously, we published an article that focuses on the readability of audit reports in Tunisia. Furthermore the subject of comprehensibility, we analyzed the length of the reports of the independent auditors. The same article shows that the Tunisian audit reports do not comply with the linguistic formulas including readability indexes.

The incompleteness of previous research leads us to perform a more advanced study. The deepening of this study supports the assessment of professional competence and the development of communication skills. The imperfection of previous research leads us to achieve a new empirical investigation. This investigation requires detailed measurement of the length of the audit reports.

Audit quality reporting influences the interpretation of financial statements. The number of audit information is a factor explaining the behavior of users of financial statements (managers, owners, employees, institutional investors, financial institutions, government, general mass and media). Investors reacted with understandable reports (Fakhfakh, 2013). The length of audit reports is a sign of informational relevance.

The length of the auditors' reports can be seen as a characteristic that determines the relevance of the financial audit (Zeghal, 1999). Large reports are considered as a source of information that reassures users of financial statements (Hatherly et al., 1997). Periodically, these users require relevant and reliable audit information. The synthesis of audit information is based on international standards on auditor's report. This standard provides several illustrations that model the report of the independent auditor. Despite standardization efforts, the linguistic quality of the illustrations could be questioned (Fakhfakh, 2014).

Linguistically, the structure of audit reports must comply with the qualitative principles that develop financial reporting. Conceptual frameworks for financial accounting stipulate that the accounting information should refer to the qualitative characteristics of financial statements (such as comparability, objectivity, utility, and understandability). Linguistic analyzers provide several formulas that measure the comprehensibility of audit reports. Such analyzes will be imperfect when structural characteristics will be neglected (length, lexical richness, clarity). The credibility of

linguistic analysis enforces the reliability of statistics that summarize the structure and the text size.

Towards the obligations of compliance with auditing standards and language requirements, the independent auditors must optimize the quality of audit reports. This optimization requires the minimization of the informational constraints that hamper performance audit reports. In this article, we analyze the organization of audit reports standardized by the International Federation of Accountants. The detailed study of these reports allows measuring the length of audit information. Such a measure is necessary for the detection of determinants of the incomprehensibility of audit reports.

The organisation of this paper is as follows: after the introduction, there is an overview of conceptual framework for the readability of auditing information. The third section provides an analysis of normative requirements about the wording of the reports of the independent auditors. The fourth section focuses on the linguistic performance of the reports standardised by the International Federation of Accountants. This section describes the methodology and the sample used in the empirical study. The fifth section analyses the importance of compromise between the principles of auditing and linguistic rules. The sixth section discusses the implications of research findings. This section is devoted to drawing the main conclusions.

## 2. Linguistic framework for the wording of auditor's report

### 2.1. The linguistic requirements for the structure of auditor's report

With regard to the structural efficiency of audit reports several linguistic norms governing the organization and the formal presentation of the corpus. More specifically, the attention of all analyzers is given to the length of reports and their components (word length, the size of sentences and paragraphs).

The word, as a component of sentences is the core text. The word consists of a sequence of graphic characters which form a semantic unit. The number of characters is a reliable measure of the word length. The classification of words (short words, means words, long words) is influenced by readability statistics that show the average lengths. The word length reflects the degree of difficulty of reading. Beyond 9 letters, words will be judged illegible (Table 1.1).

The number of syllables is also a measure of word length. When the number of syllables is high, the word length will significant. Beyond three syllables, the word is considered complicated. The plurality of syllables reflects the level of complexity of words (Table 1.2). All readability formulas consider the word length. Word size is a variable that affects the comprehensibility of texts and communications performance.

Sentence length is a criterion of readability. It indicates the syntactic and semantic difficulty of the text. Most readability formulas are based on the length of phrases. The length of the phrases that can be measured by number of words can predict the degree of difficulty of reading (Table 1.3).

The texts are more readable when sentences are short. Conversely, a text is more difficult if the sentences are long. In addition, short sentences determine the thematic coherence. According to linguistic research, the length of sentences is considered an index of quality of written texts. Reducing the size of the sentence promotes

**Table 1**  
Linguistic principles for the length of words/sentences.

Table 1.1. Word length (measured by the number of character)		
Linguistic units	Number of characters	Level of difficulty
short words	Words with less than 4 characters	Low
means words	Words with 5-9 characters	Moderate
long words	Words with more than 10 characters	Extreme
Table 1.2. Word length (measured by the number of syllables)		
Linguistic units	Number of syllables	Level of difficulty
short words	one syllable	Low
means words	two syllables	Moderate
long words	Words with more than three syllables	Extreme
Table 1.3. Sentence length (measured by the number of words)		
Linguistic units		Level of difficulty
Short sentence	Sentence with less than 15 words	Low
Sentence with moderate length	Sentence of 15 to 20 words	Moderate
Long sentence	Sentence containing more than 20 words	Extreme

Author elaboration.

the quality of information. In order to clarify the text, linguistic rules advocate the inclusion of sentences not exceeding 20 words (Table 1.3).

Personal skills influence the quality and length of sentences. The level of education determines the size and structure of sentences. Besides the length of sentences, several factors favor the comprehensibility of texts (grammatical and lexical cohesion, complexity of vocabulary, syntactic difficulty). According to linguistic principles, the sentence should not include more than 15 words. Clarity of sentences is violated when the number of words is increased.

## 2.2. The normative readability of auditor's report

Readability is a fundamental characteristic that is always stipulated in writing techniques and theories of communication. This characteristic is a principal component of Text Analyzer Tools. Most texts analyzers display several statistical indicators that measure the readability of documents.

Linguistic literature offers a multitude of definitions for readability and its meanings. These definitions are made by several authors and experts who continuously work on the theme of understandability. According to DuBay (2004), readability is what makes some texts easier to read than others. It is often confused with legibility which concerns typeface and layout. Klare (1963) defines readability as the ease of understanding or comprehension due to the style of writing. This definition focuses on writing style as separate from issues such as content, coherence, and organisation.

In a similar manner, Hargis et al. (1998) state that readability is the ease of reading words and sentences and is an attribute of clarity. McLaughlin (1969) defines readability as the degree to which a given class of people finds certain reading matter compelling and comprehensible. This definition stresses the interaction between the text and a class of readers of known characteristics such as reading skill, prior knowledge, and motivation.

Readability is the ease in which text can be read and understood. It incorporates a set of factors that interact to provide ease of understanding of print (DuBay, 2004). Readability research has resulted in the development of formulas to estimate the relative success of legibility of written messages without requiring the reader to actually read it and be tested.

The first aim of the formulas readability was to develop practical methods to match reading materials with the abilities of students and adults. These efforts centered on making easily applied readability formulas that teachers and librarians could use.

Historically, the first readability formulas were proposed by researchers in reading. These formulas have been developed and used in several areas: education, industry and the military. These measures assist the publication of texts and predict the readability of documents. The linguistic experts have proposed several formulas that measure the ease of reading such as the Flesch Reading Ease (Flesch, 1948). Other researchers have developed formulas to predict the level of education for understanding (Lively & Pressey, 1923; Washburne & Vogel, 1926; Gray & Leary, 1935).

The Flesch Reading Ease (FRE) is a statistical measure of readability. This test rates text on a 100 point scale and use the following formula:  $206.835 - (1.015 * \text{words per sentence}) - (84.6 * \text{syllables per word})$ . In the same Flesch test, higher scores indicate material that is easier to read. Lower numbers mark harder-to-read passages (Flesch, 1948).

The Gunning fog index (Gunning, 1952) is another test designed to measure the readability of a sample of English writing. The resulting number is an indication of the number of years of formal education that a person requires in order to easily understand the text on the first reading. The test was developed by Robert Gunning in 1952. The fog index is generally used by people who want their writing to be read easily by a large segment of the population.

All readability formulas consider a number of factors like average word length or number of characters per word (number of characters divided by the number of words), average sentence length in words or average number of words in sentence (number of words divided by the number of sentences), average number of sentences, average number of syllables per word (the number of syllables divided by the number of words), and the count of the "complex" words (those with three or more syllables).

According to the linguistic literature, a Flesch Reading Ease score of 60-70 is desirable for English texts. Writing principles postulate that the texts which are designed for a wide audience generally require a fog index of less than 12. Table 2 displays an overview of linguistic criteria used in the formulas of readability.

## 2.3. The measurement of understandability (The advanced level of readability)

Linguistically, understandability is related to the perception of the correct meaning of the texts. Intelligibility assumes that readers are able to read the content of the information and the meaning of ideas. Understandability as qualitative characteristic is conditioned by several factors such as: writing skills, reliability of communication tools and skills of reading.

Furthermore readability formulas, theories of communication advocated several indicators that measure the understandability of texts. Linguistic parameters that are most commonly used include the lexical density (Density indicator), sentence complexity and complexity of vocabulary.

The density indicator is seen as a relevant measure of understandability. In definitional terms, the lexical density (Complexity factor) is a readability test designed to show how easy or difficult a text is to read. This test tries to measure the proportion of the content (lexical) words over the total words. Texts with a lower density are more easily understood. As a guide, lexically dense text has a lexical density of around 60-70% and those which are not dense have a lower lexical density measure of around 40-50%.

The detailed study of sentences is necessary to assess the level of understandability of texts. Syntactic difficulty and semantic complexity of sentences can predict problems of understandability. As an indicator of understandability, linguistic principles provide a

**Table 2**  
Linguistic requirements for the readability of auditing information.

Readability formulas	Linguistic formulas	Score	Level of difficulty
Flesch Reading Ease	$206.835 - (1.015 \times \text{ASL}) - (84.6 \times \text{ASW})$	71 or more 60–70 Less than 60	Low Moderate Extreme
Gunning fog index	$(0.4 \times \text{ASL}) + \text{percentage of complex word}$	Less than 9 9–12 13 or more	Low Moderate Extreme

Source: DuBay (2004).

statistic that measures the complexity of sentences. This statistic takes into account several criteria such as word length, ambiguity and sentence structure. The evaluation of the difficulty of vocabulary contributes to measuring the understandability of texts. The complexity of the vocabulary is seen as a parameter that determines the intelligibility of the corpus. When the complexity of the vocabulary is high, texts and written reports are unintelligible.

### 3. The wording of the reports of the independent auditors: the normative requirements

The efforts made to achieve international harmonization of the audit report, which led to the publication of the International Standard (ISA700) bear witness to the successful pursuit of an international consensus in auditing opinion. The International Federation of Accountants issued the International Standard on Auditing 700 “The Auditor’s Report on Financial Statements”. This standard enumerates various elements related to the wording of the auditor’s report on financial statements.

Five elements dealing with the form of the same report are identified, covering the title of the auditor’s report, the addressee, the date of the audit report, the auditor’s address and the auditor’s signature. In addition to form, ISA700 prescribes 22 elements that relate to content. These elements serve to describe the introductory paragraph, the management’s responsibility, the auditor’s responsibility and the opinion paragraph.

The International Standard on Auditing 700 provides three illustrations of auditors’ reports with unmodified opinions. The first illustration standardises the auditor’s report on financial statements prepared in accordance with a fair presentation framework designed to meet the common financial information needs of a wide range of users. The wording of this illustration would be worded in the following circumstances:

- audit of a complete set of financial statements;
- the financial statements are prepared for a general purpose by management of the entity in accordance with International Financial Reporting Standards;
- the terms of the audit engagement reflect the description of management’s responsibility for the financial statements in ISA 210; and
- in addition to the audit of the financial statements, the auditor has other reporting responsibilities required under local law.

The second illustration normalises the auditor’s report on financial statements prepared in accordance with a compliance framework designed to meet the common financial information needs of a wide range of users. The content of this illustration would be adopted when the following circumstances are applicable:

- Audit of a complete set of financial statements required by law or regulation.

- The financial statements are prepared for a general purpose by management of the entity in accordance with the Financial Reporting Framework of Jurisdiction.
- The terms of the audit engagement reflect the description of management’s responsibility for the financial statements in ISA 210.

The third illustration is recommended for the auditor’s report on consolidated financial statements prepared in accordance with a fair presentation framework designed to meet the common financial information needs of a wide range of users. The wording of this illustration is required for the following situations:

- audit of consolidated financial statements prepared for a general purpose by management of the parent in accordance with International Financial Reporting Standards;
- the terms of the group audit engagement reflect the description of management’s responsibility for the financial statements in ISA 210; and
- in addition to the audit of the group financial statements, the auditor has other reporting responsibilities required under local law.

ISA 705 and ISA 706 deal with how the form and content of the auditor’s report are affected when the auditor expresses a modified opinion or includes an emphasis of matter paragraph or another matter paragraph in the auditor’s report.

Table 3 shows the elements of the audit reports prepared according to the ISA700. It illustrates how the auditor’s judgment about the nature of the matter giving rise to the modification, and the pervasiveness of its effects or possible effects on the financial statements, affects the type of opinion to be expressed.

### 4. Qualitative characteristics of illustrations provided by the International Standards on auditing reports: A linguistic analysis

#### 4.1. The length of illustrations provided by the International Standards on auditing reports

For this study, the analysis of linguistic features of international audit reports is assisted by a Text Analysis Tool. The software provides several statistics that summarise the structural features of the text: Complexity factor (or Lexical density), total number of characters, average syllables per word, word length, syllable count and words phrases frequency. In addition to these detailed statistics, the software displays the readability score (Flesch reading ease/Gunning-Fog Index). Other linguistic parameters that measure the length of texts have been calculated. These indexes summarise the word length, sentence length and paragraph length.

The electronic copy of International Standards ISA 700 was downloaded in order to analyse the structural characteristics of the unmodified audit reports. This download has been performed from the electronic site of the International Federation of Accountants. The French translation was considered in order to strengthen the linguistic analysis.



**Table 3**  
Elements of the audit reports prepared according to the International Standards on auditor's report.

Elements of the auditor's report	Nature of matter giving rise to the modification	Auditor's judgment about the pervasiveness of the effects or possible effects on the financial statements	Types of modified opinions	Illustrations of auditors' reports with modifications to the opinion
<i>Elements of form</i>				
Title	Financial statements are materially misstated	Material but Not pervasive	Qualified opinion	Illustration 1 (ISA 705)
Identification of addressee				
Date of the report				
Auditor's address		Material and pervasive	Qualified opinion and emphasis of matter Adverse opinion	Illustration 1 (ISA 706) Illustration 2 (ISA 705)
Auditor's signature				
<i>Elements of content</i>				
Section with the heading "Introductory Paragraph"	Inability to obtain sufficient appropriate audit evidence about a single element of the financial statements	Material but not pervasive	Qualified opinion	Illustration 3 (ISA 705)
Section with the heading "Management's Responsibility"				
Section with the heading "Auditor's Responsibility"	Inability to obtain sufficient appropriate audit evidence about multiple elements of the financial statements	Material and pervasive	Disclaimer of opinion	Illustration 4 (ISA 705)
Section with the heading "Auditor's Opinion"		Material but not pervasive	Qualified opinion	Illustration 3 (ISA 705)
		Material and pervasive	Disclaimer of opinion	Illustration 5 (ISA 705)

Source: International Standards on auditor's report (ISA 700 and ISA 705).

The analysis of the used data is assisted by tests of statistical inference. These statistical tools are used to test the heterogeneity (and comparability) of independent samples. Another statistical test such as the one sample test is used in order to compare the mean with a hypothetical value. These values are attached to the normative scores that are generally recommended by the accountant and linguistic literature.

Regarding standardized reports by ISA 700, the results show that the third illustration presents the longest audit report. The lengthening of the wording of the report is justified by the large number of words (405), number of sentences (19) and number of lines (40). However, the second illustration standardizes the shortest wording of auditor's report (Table 4).

Among the reports that are standardized by the English ISA 705, the statistical measures indicate that the second illustration communicates the message that is the longest (Table 4). Conversely, the fourth figure offers a short text report. The shortening of this report is validated by the reduced number of words (360), number of sentences (18), number of lines (35) and number of paragraphs (14). For the French standard, the third illustration communicates the wording that is the longest. Conversely, the fourth figure offers a short text report (Table 4).

#### 4.2. The readability of illustrations provided by the International Standards on auditing reports

Among the standardized wording of unmodified audit report (ISA 700), the second illustration of report recommends the most readable (Flesch Reading Ease Score at 9.44). The lowest readability score corresponds to the third illustration of report which includes an unmodified opinion. For this same standard, the average readability score (between the three illustrations) is 5.64. The education level of Gunning-Fog Score, said that the reports illustrated by ISA 700 are complex. On average, the intelligibility of these reports requires 15 years of schooling. Similarly, the third illustration is the most complex (Table 4).

Regarding French illustrations of international auditors' reports, the second illustration provides the most intelligible language (Score of Flesch Reading Ease is 23.72). From the same scale Flesch, the third illustration models the audit report that is less readable by users of financial statements. For all illustrations, the average index of readability is around 18.07.

#### 4.3. The auditing legibility and compliance with linguistic principles

According to the clear writing principles, the use of long words intensifies the difficulty of reading. Nine characters (or three syllables) per word is a good average. For the full audit reports, the average word length is around 6.73 (per character) and 2.09 (per syllables). These lengths are consistent with the principles of comprehensible writing. At the level of significance (Alpha = 0.05), the results of the One-Sample t-test rejects the hypothesis that the average word length is strictly greater linguistic standards (Table 5).

According to the clear writing rules, sentences must vary in length to avoid boring your reader. But the average length should be short. Fifteen to 20 words per sentence is a good average. The average sentence length (For English standard ISA 700) was about 29.16 words.

All illustrations of audit reports slightly exceed the linguistic rules. Towards the language standards, the One-Sample Student's t Test is applied in order to estimate if the average sentence length is excessive. At the level of significance (Alpha = 0.05) the decision is to reject the null hypothesis that the mean is equal to 20. In other words, the alternative hypothesis that the mean is greater than 20 is significant (Table 5).

**Table 4**  
Structural characteristics of illustration provided by the International Standards on auditor's report (ISAs 700, 705 and 706).

International ISAs	Linguistic measurement			Illustrations of auditors' reports provided by ISA 700					Illustrations of auditors' reports provided by ISA 705					ISA 706
	1	2	3	1	2	3	4	5	1	2	3	4	5	1
English standards on auditor's report (ISAs 700, 705 and 706)	Total word count	388	350	405	519	534	526	360	431	566	3478	2371	2805	3768
	Total number of characters	2638	2386	2846	3466	3686	16	14	15	18	16	35	40	57
	Number of paragraph	15	14	14	17	16	48	50	48	21	24	23	21	27
	Number of lines	38	35	40	48	50	19	18	19	27	24	25	21	27
	Number of sentences	19	18	19	19	25	6.68	6.90	6.61	6.51	6.66	6.61	6.59	6.51
	Average word length (per characters)	6.80	6.82	7.03	6.68	6.90	2.05	2.16	2.04	2.05	2.05	2.04	2.05	2.05
	Average word length (per syllables)	2.10	2.10	2.20	2.05	2.16	21.62	21.36	22.87	20	20.96	22.87	20	20.52
	Average sentence length (per words)	20.42	19.44	21.32	21.62	21.36	30.53	33.37	32.87	25.71	31.44	32.87	25.71	28.73
	Average paragraph length (per words)	25.87	25	28.93	30.53	33.37	1.27	1.36	1.44	1.4	1.5	1.44	1.29	1.4
	Average paragraph length (per sentences)	1.27	1.29	1.36	1.41	1.29	11.45	11.04	11.04	12.48	12.02	11.04	13.10	12.48
Index of readability (Flesh Reading Ease)	8.40	9.44	-0.92	11.45	15.68	15.49	16.01	14.88	15.00	15.27	16.01	14.88	15.00	
Indicators of education level (Gunning-Fog Score)	15.23	14.9	15.66	15.49	15.68	556	571	435	616	616	571	435	616	
Total word count	399	368	427	3846	3976	3935	2654	3030	4308	3935	2654	3030	4308	
Total number of characters	2887	2603	3122	11	9	9	10	12	12	11	10	12	12	
Number of paragraph	9	11	12	51	52	53	37	42	58	53	37	42	58	
Number of lines	40	36	42	24	25	24	18	21	30	24	18	21	30	
Number of sentences	19	19	20	20	25	20	18	21	30	20	18	21	30	
Average word length (per characters)	7.24	7.07	7.31	7.02	7.18	6.98	6.98	7.06	7.11	6.98	6.98	7.06	7.11	
Average word length (per syllables)	2	1.93	2.02	1.93	2.01	2.02	1.92	1.90	1.95	1.92	1.92	1.90	1.95	
Average sentence length (per words)	21	19.37	21.35	22.83	22.16	24.52	21.11	20.43	20.20	24.52	21.11	20.43	20.20	
Average paragraph length (per words)	44.33	33.45	35.58	49.82	61.56	62.67	38.00	39.00	50.50	62.67	38.00	39.00	50.50	
Average paragraph length (per sentences)	2.11	2.11	1.67	2.18	2.78	2.56	1.80	1.91	2.50	2.56	1.80	1.91	2.50	
Index of readability (Flesh Reading Ease)	16.32	23.72	14.18	20.32	14.23	19.49	22.89	25.18	21.32	19.49	22.89	25.18	21.32	
Indicators of education level (Gunning-Fog Score)	20.3	18	21.4	20.7	20.4	22.4	22.5	19.9	19.7	22.4	22.5	19.9	19.7	

Source: Fakhfakh Survey, 2015.

In terms of readability, and according to the linguistic literature, a Flesch Reading Ease score of 60-70 is desirable. Towards these desirable standards, statistical tests show that the illustrations provided by the International Standards on auditor's report are not readable by a wide range of users of financial information (Table 6). Writing principles postulate that the desirable level of education should not exceed 12. The statistical results show that the Average Grade Scale (for all illustrations) exceeds the level of education recommended by the linguistic principles.

## 5. The illegibility of international auditor's report and the optimization of linguistic rules: The research of compromise

Linguistically, audit results are efficient when the structure of audit reports meet the prescribed standards for the clarity of written texts. Theatricality, the content of these reports is intelligible when the authors consider readability formulas that are recommended by the literature. For several reasons (accounting reasons, technical reasons and informational reasons) the independent auditors will be forced to use long words and long sentences that relate various findings. Therefore, the independent auditors will ignore the recommendations challenging the difficulty of sentences.

Towards the obligation to ignore some linguistic rules, it is important to seek a relationship with a balanced text (i.e. a report that is acceptable and linguistically efficient). Achieving a compromise between the different requirements is still requested by the independent auditors (normative requirements, professional requirements, linguistic requirements and information requirements). Professional accountants are keen to enhance the communicative value of audit reports. Several solutions are considered when the accounting standard does not improve the linguistic quality of audit reports.

### 5.1. The use of text analyzers

Several computer programs integrate analyzers which assist the correction of draft reports. Linguistic performance of auditors' reports is evaluated on several levels (syntactic analysis, parsing, semantic analysis, structural analysis). Audit appreciation and critical reading of the results can produce intelligible audit reports for a wide range of users of financial statements.

The advanced linguistic analysis is relevant for preparers of audit reports. Such analyze facilitates the exploration of the corpus of audit reports and the characteristics of the vocabulary. The analyzers texts perform qualitative research and display the characteristics of linguistic units (technical terms, business concepts). These tools analyze the difficulty of a text according to on several parameters: word length, size of sentences and paragraphs. Most analyzers are used to test the readability of the text in order to provide the level of understanding of the information.

The independent auditors should use text analyzers to improve the presentation and organization of audit information. The analyses of textual data (or textual statistics) improve the preparation and submission of audit reports. Before the signing of audit reports, independent auditors should analyze the form and content of audit information. The analyzers provide linguistic assistance that enriches the text, the lexicon of semantic and grammatical data.

### 5.2. The improvement of the translation of international auditing standards on auditor's report

Originally, the international auditing standards were issued in English. Several organisations translate these accounting standards

**Table 5**  
One-sample Student's t Test for average word/sentence length.

One-sample Student's t Test (Average word length per character)					
Illustrations of international auditor's reports	t (observed value)	t (critical value)	DF	One-tailed p-value	Alpha
Illustrations provided by the ISA 700	-28.77	2.92	2	1.00	0.05
Illustrations provided by the ISA 705	-35.33	2.13	4	1.00	0.05
Illustrations provided by the ISA 705 and ISA 706	-43.26	2.02	5	1.00	0.05
One-sample Student's t Test (Average word length per syllable)					
Illustrations of international auditor's reports	t (observed value)	t (critical value)	DF	One-tailed p-value	Alpha
Illustrations provided by the ISA 700	-26.00	2.92	2	1.00	0.05
Illustrations provided by the ISA 705	-41.18	2.13	4	1.00	0.05
Illustrations provided by the ISA 705 and ISA 706	-49.81	2.02	5	1.00	0.05
One-sample Student's t Test (Average sentence length per words)					
Illustrations of international auditor's reports	t (observed value)	t (critical value)	DF	One-tailed p-value	Alpha
Illustrations provided by the ISA 700	0.72	2.92	2	0.27	0.05
Illustrations provided by the ISA 705	2.58	2.13	4	0.03	0.05
Illustrations provided by the ISA 705 and ISA 706	3.01	2.02	5	0.01	0.05

Source: Fakhfakh Survey, 2015.

**Table 6**  
One-sample Student's t Test for index of readability.

One-Sample Student's t Test (Flesch Reading Ease)					
Illustrations of international auditor's reports	t (observed value)	t (critical value)	DF	One-tailed p-value	Alpha
Illustrations provided by the ISA 700	-16.50	2.92	2	0.99	0.05
Illustrations provided by the ISA 705	-25.32	-2.13	4	0.00	0.05
Illustrations provided by the ISA 705 and ISA 706	-30.21	2.02	5	1.00	0.05

Source: Fakhfakh Survey, 2015.

to encourage the independent auditors to comply with international accounting doctrine. The translation of international auditing standards is carried out in accordance with the IFAC Policy Statement - Policy for Translating and Reproducing Standards. The French translation of several international standards is conducted by The Canadian Institute of Chartered Accountants (CICA). The official translation is reproduced with the permission of IFAC.

It is generally accepted that translation work faces several constraints such as: preservation of the meaning of auditing standards; fidelity to the original text; and the maintenance of linguistic performance standards (Fakhfakh, 2015). According to the linguistic measures, the organization of English audit reports is not similar to the structure of reports translated into French. The Chi-square test rejects the hypothesis of homogeneity of the structures of reports submitted by two versions: English and French (Table 7).

The standard translation process is based on textual strategies to overcome problems of understanding and communication. Translation is a delicate task since it determines the equivalent terminology in a foreign language. Translation of English standards on auditor's report must be treated to improve communication of audit results.

### 5.3. Optimization of communication skills

Linguistic literature provides several writing techniques which allow the transmission of clear and simple messages. The independent auditors must optimize the use of communication techniques to simplify the content of the audit reports. Previous researches on the expectation gap indicate that audit reports should be written clearly and simply.

The clarity of audit reports assumes that readers can fully understand the audit information. Reading difficulty is increased when the audit report is characterized by the disorder of ideas, excessive

redundancy, lack of linguistic rigor and neglect of relevant information.

The independent auditor must issue a report that contains all the explanatory information of financial statements. The summary of the audit results must meet several linguistic principles such as: clarity, conciseness, simplicity, consistency and coherence. The same independent auditors must enhance the quality of their reporting in order to meet the information needs of stakeholders. Further analysis of audit reports contributes to the transmission of clear information and reasonably readable messages.

### 5.4. The consultation of linguistic experts and specialists in communication

In our opinion, the International Federation of Accountants should improve the international standards that illustrate the reports of independent auditors. Accounting standard setters and auditing bodies should consult experts in linguistics. The participation of these experts enriches the standardization of audit reports and optimizes the resolution of accounting issues.

Currently, the role of linguistic experts is appreciated in many areas (industrial, high technology, management, policy, and education). International communications schools ensure the scientific training of linguistic experts. This training focuses on the methods and tools that support the transmission of written information. The mastery of technical language is a key to the success of contemporary international communications (such as information exchanges among global partners, exchanges between the subsidiaries and intercontinental projects).

The International Federation of Accountant must consider the communication skills in order to improve the quality of auditing standards. The cooperation of experts in linguistics contributes to the improvement of rules that prescribe the wording of audit reports.

**Table 7**  
Test on contingency table for linguistic features of translated audit report.

Table 7.1. Illustration of audit report provided by the ISA 700			
	English illustration	French illustration	Chi-square test (One-tailed p-value)
Number of words with less than three syllables	465	572	0.00
Number of words with three or more syllables	290	223	
Number of words with less than nine characters	549	536	0.02
Number of words with nine or more characters	206	259	
Number of different words	280	346	0.01
Number of similar words	475	449	

  

Table 7.2. Illustration of audit report provided by the ISA 705			
	English illustration	French illustration	Chi-square test (One-tailed p-value)
Number of words with less than three syllables	1184	1376	0.00
Number of words with three or more syllables	667	575	
Number of words with less than nine characters	1380	1464	0.73
Number of words with nine or more characters	471	487	
Number of different words	715	795	0.18
Number of similar words	1136	1156	

  

Table 7.3. Illustration of audit report provided by the ISA 706			
	English illustration	French illustration	Chi-square test (One-tailed p-value)
Number of words with less than three syllables	366	436	0.03
Number of words with three or more syllables	200	180	
Number of words with less than nine characters	423	465	0.77
Number of words with nine or more characters	143	151	
Number of different words	210	247	0.29
Number of similar words	356	369	

Source: Fakhfakh Survey, 2015.

In most cases, the development of audit standards is supervised by the International auditing firms and accounting bodies. The participation of specialists in linguistics is necessary to improve the quality and intelligibility of auditing messages.

## 6. Implication of results and final remarks

In this article, the results show that the normalization of audit reports is imperfect. International auditing standards provide an audit report that is not readable by all users of financial statements. Consequently, the independent auditors should look for solutions to improve the reading and interpretation of the audit information. Accounting practice must seek a compromise between the audit rules and language principles. Our paper is mainly intended for several groups that are interested in the auditing information. These groups include: the International Federation of Accountants, Institutes of Certified Public Accountants, statutory auditors, internal and external users of financial statements.

Despite all the deficiencies, the audit report is an important tool for communication and a mechanism that reduces information asymmetry. Auditing standards should consider the linguistic rules to improve the readability of auditing reports. Empirically, several determinants may explain the variability of readability of standardized illustration of audit reports (Fakhfakh, 2013). Among the explanatory variables of this phenomenon, we can consider: the impact of the translation of international standards on auditing, the impact of the modification of the auditor's opinion and the impact of the reform of standards on auditors' reports.

As a supranational accounting body, The International Federation of Accountants is invited to review the illustrations provided by the international standards on auditor's report. The quality of audit reports can influence the usefulness of accounting information and reliability of the financial markets. The relevance of the opinion of

the independent auditor will be forgotten when the audit report is not understandable.

The incomprehensibility of audit reports promotes ambiguity of accounting information and the complexity of the financial statements. Financial information is more asymmetric when the audit information is illegible. The unreadable opinions disrupt the behavior of users of financial statements and especially donors and shareholders. With illegible labels, investors and shareholders do not accept reliable references to justify their financial and economic decisions.

The imperfection of auditing standards can affect the content and form of the consolidated audit report. Currently the body of this report is defined by the international standard ISA 700. Users of consolidated financial statements require readable reports. The readability of the reports affects the understanding of the financial position of groups of companies.

The illegibility of audit results could hamper the international harmonization of audit reports. The harmonization of auditing reports is identified as the process, which aims at the reduction of the audit practices diversity and ensures their convergence in matter of the audit communicative means (Hussein, Bavishi, & Gangolly, 1986; Archer, Mcleay, & Dufour, 1989; King, 1999; Gangolly, Hussein, Seow, & Tam, 2002; Fakhfakh & Fakhfakh, 2010). It aims at minimizing the divergences among the normative national regulations that govern the communications between the auditors and other stakeholders.

## References

- Archer, S., Mcleay, S., & Dufour, J. (1989). *Audit report on financial statements of European multinational companies: A comparative study*. London, England: The Institute of Chartered Accountants in England and Wales.
- Barnett, A., & Loeffler, K. (1979). Readability of accounting and auditing messages. *Journal of Business Communication*, 16, 49–59.



- DuBay, H. (2004). The principles of readability. Costa Mesa, CA. Retrieved from <http://www.impactinformation.com/impactinfo/readability02.pdf>
- Fakhfakh, H., & Fakhfakh, M. (2010). The impact of revised ISA 700: An international empirical comparison. *International Journal of Accounting, Auditing and Performance Evaluation*, 6, 274–326.
- Fakhfakh, M. (2013). The readability of standardised reports by the International Federation of Accountants. *Journal of Commerce and Accounting Research*, 2, 10–28.
- Fakhfakh, M. (2014). Structural features and understandability of the international auditors' reports: Linguistic evidence from the International Standard on Auditing 700. *Working Paper*, University of Sfax.
- Fakhfakh, M. (2015). Linguistic performance and legibility of auditors' reports with modified opinions: An advanced investigation based on the ISAs on audit reports. *Asian Review of Accounting*, (forthcoming).
- Flesh, R. (1948). A new readability yardstick. *Journal of Applied Psychology*, 32, 221–233.
- Gangolly, J. S., Hussein, M. E., Seow, G. S., & Tam, K. (2002). Harmonisation of the auditor's report. *The International Journal of Accounting*, 37, 327–346.
- Gonthier, N. (1996). Contribution à l'analyse de l'information transmise par les rapports d'audit. Thèse de doctorat de sciences de gestion. Université de Paris IX Dauphine.
- Gray, W., & Leary, B. W. (1935). *What makes a book readable*. Chicago: University of Chicago Press.
- Gunning, R. (1952). *The technique of clear writing*. New York: McGrawHill.
- Hargis, G., Hernández, A. K., Hughes, P., Ramaker, J., Rouiller, S., & Wilde, E. (1998). *Developing quality technical information: A handbook for writers and editors*. Upper Saddle River, NJ: Prentice Hall.
- Hatherly, D., Innes, J., & Brown, T. (1997). The expanded audit report: A research study with the development of SAS 600. *Journal of Accounting Auditing and Finance*, 10, 702–717.
- Hay, D. (1998). Communication in auditors' reports: Variations in readability and the effect of audit firm structure. *Asia Pacific Journal of Accounting*, 5, 179–197.
- Holt, G., & Moizer, P. (1990). The meaning of audit reports. *Accounting and Business Research*, 20, 111–121.
- Hussein, M. E., Bavishi, V., & Gangolly, J. S. (1986). International similarities and differences in the auditor's report. *Auditing: A Journal of Practice and Theory*, 6, 124–133.
- King, C. R. (1999). The measurement of harmonization in the form and content of auditor's report in the European Union. *Journal of International Accounting, Auditing and Taxation*, 8, 23–42.
- Klare, G. R. (1963). *The measurement of readability*. Ames, Iowa: Iowa State University Press.
- Lively, B. A., & Pressey, S. L. (1923). A method for measuring the vocabulary burden of textbooks. *Educational Administration and Supervision*.
- McLaughlin, G. H. (1969). SMOG grading - A new readability formula. *Journal of reading*, 22, 639–646.
- Washburne, C. W., & Vogel, M. (1926). *Winnetka graded book list*. Chicago: American Library Association.
- Zeghal, D., Maingot, M., & Tassé, M. (1999). An examination of the length and organisation of the auditor's report- An international comparison. *Working paper*, University of Ottawa.