Service organization control reporting - the convergences and divergences between ISAE 3402 and SSAE 18 under the scope of SOC 1

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SERVICE ORGANIZATION CONTROL REPORTING

THE CONVERGENCES AND DIVERGENCES BETWEEN ISAE 3402 AND SSAE 18 UNDER THE SCOPE OF SOC 1

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LIST OF ABBREVIATIONS

AICPA - American Institute of Certified Public Accountants

ASB - Auditing Standards Board

BCBS - Basel Committee on Banking Supervision

BPO - Business Process Outsourcing

FASB - Financial Accounting Standards Board

IAASB - International Auditing and Assurance Standards Board

IAESB - International Accounting Education Standards Board

IAIS - International Association of Insurance Supervisors

IAPS - International Auditing Practice Statements

IASB - International Accounting Standards Board

IESBA - International Ethics Standards Board for Accountants

IFAC - International Federation of Accountants

IFAE - International Framework for Assurance Engagements

IFRS - International Financial Reporting Standards

IOSCO - International Organization of Securities Commissions

ISA - International Standard on Auditing

ISAE - International Standards on Assurance Engagements

ISQC - International Standards on Quality Control

ISRE - International Standards on Review Engagements

ISRS - International Standards on Related Services

KPO - Knowledge Process Outsourcing

LPO - Legal Process Outsourcing

PcEEC - Pre-certification Education Executive Committee

PEEC - Professional Ethics Executive Committee

PIOB - Public Interest Oversight Board

PSP - Payroll Service Provider

RPO - Recruitment Process Outsourcing

SDO - Standards Developing Organization

SEC - Securities and Exchange Commission

SOC - Service Organization Control

SSO - Standards Setting Organization

TA - Transfer Agent

TPA - Third-Party Assurance

TPCA - Third-Party Claim Administrator

TSP - Trust Services Principles

PREFACE

This research thesis was carried out as part of the Master's degree in Management Sciences with a specialization in Financial Analysis and Audit, which is supervised by HEC Liège, Business School of the University of Liège.

Although this work is intended to be as universal as possible, it is ineluctably oriented towards a European and North American perspective. These markets are indeed the most affected by the subject of this thesis. The theoretical framework as well as the concepts developed, however, remain applicable in the most extensive way.

Terminology being crucial, the author would also like to highlight the fact that the term ‘Service Organization Control’ abbreviated SOC, will be used through this work as a generical term. The author is indeed aware that the term SOC takes its origins from the American Institute of Certified Public Accountants (AICPA) which introduced it with the auditing standard SSAE 16 in 2010. At that time, a SOC audit was the terminology used by auditors performing an audit under the SSAE 16 standard. The author considers, however, that this terminology is now sufficiently recognized by audit professionals as a general term for any examination of service providers internal control, regardless of the standard applied.

INTRODUCTION

In an increasingly globalized world, a major phenomenon has been interconnecting companies for decades now. Simultaneously a cause and a symptom of this globalization, outsourcing is indeed a major economical factor which has been evolving with the nature of capitalism itself. Trying to imagine a world without outsourcing is thus virtually impossible nowadays (Kim, 2018).

With a global market size of 85.6 billion USD in 2018, outsourced services undoubtedly represent a massive business. Despite a modest decrease in regards to its 2014 peak (104,6 billion USD), the size of the outsourcing market has approximately doubled since the beginning of the millennium (Statista, 2019).

Over the last few decades, companies have indeed increasingly outsourced parts of their systems and business processes to service organizations. This transfer of activities from global entities to specialized service providers has enabled companies to focus on their core business, cut their costs, and solve internal issues (Deloitte, 2016).

In pursuit of efficiency and profitability, companies entering this kind of corporate relationship are logically becoming more integrated with their service providers. This transfer of functions and processes, however, has also resulted into a loss of control for companies. It has in fact relocated the internal control and monitoring of the outsourced processes to service organizations while keeping the commercial risk on the companies relying on them (Deloitte, 2018).

It is within this context that organizations specialized into providing services to large firms, expressed their will to demonstrate the efficiency of their control processes. Obtaining an independent assurance over their internal control has therefore become an important business matter for service organizations (Moss Adams LLP, 2017).

The outsourcing phenomenon boom, the growth in business specialization and the increasing pressure on service organizations to demonstrate the quality of their internal control, have increased the demand for Third-Party Assurance (TPA) certifications over service organization’s internal control. In practice, these independent certifications take the form of different kinds of reports which are all delivered within the framework of Service Organization Control, abbreviated SOC (Deloitte, 2018; PwC, 2019). While they are not mandatory for service organizations, external auditors reviewing service users’ financial statements tend to rely more and more on those reports to decrease audit procedures (Moss Adams LLP, 2017). Due to all these factors, the SOC architecture is thus increasingly used as an audit framework for assurance engagements on service organization's internal control.

The desire to write a research thesis on that topic arises from a personal observation: Service Organization Control auditing and reporting, is an almost unknown or not enough understood subject among the academic and professional worlds. The general public probably has no idea what these terms actually mean. In the light of the impressive development of outsourcing and the growing importance of third-party assurance, understanding and mastering such independent certification seems nonetheless to be increasingly critical. This is why Service Organization Control Reporting will be the central point of this research thesis.

As later established in this work, one type of SOC report is more prominent and better recognized than the others: the so-called SOC 1 Report. This internal control certification is in fact regulated by two specific auditing norms: the international standard ISAE 3402, developed by the International Federation of Accountants (IFAC) and the American standard SSAE 18, created by the American Institute of Certified Public Accountants (AICPA). These two standards will be the study subjects of the normative analysis performed in this work.

In addition, although the American standard SSAE 18 was released in 2016, this norm has only been in application since May 2017, which makes it a relatively topical subject to address.

In regard of these different reasons, the purpose of this master thesis is therefore twofold:

1. Serve as a guide for the general public and newcomers in the audit field willing to discover this increasingly important subject through a summary of all the necessary concepts surrounding SOC.
2. Provide a quality research work for academics and professionals eager to improve their understanding on an audit topic not taught in school and little-known by managers and practitioners.

By using a series of research questions as guidelines to lead the research work, this thesis will also fill a certain gap in the managerial literature. This research work indeed combines the theoretical literacy found in the literature with the practical results of several interviews conducted with business professionals. Those interviews were the most effective way to push the research beyond the theoretical findings and the limitations it entails. The Literature Review and Methodology sections hereafter will lay the foundations of the working approach specially defined for this thesis.

The recent development and the demand for such independent certification has to be seen as correlating with the evolution of outsourcing and the boom of services organizations. This is the reason why Chapter 1, besides defining Service Organization, significantly covers the topic of outsourcing. This chapter will explain the factors contributing to this phenomenon, the opportunities and risk of outsourcing, as well as the conceptual framework of the phenomenon. Chapter 1 will also describe different practical types of service organizations. The purpose of this chapter is to explain why today's companies increasingly rely on service organizations.

The second chapter describes the central point of this work: Service Organization Control Reporting. Chapter 2 will indeed lay the foundations of SOC reporting by explaining the reasons for such audits, defining the parties involved and describing what the subject of these specific audits exactly are. It will also detail the different ways to report it and analyze the benefits of a standardized reporting format.

The third chapter then defines what a Standard-Setting Organization is and examines the specific entities developing and issuing the auditing standards organizing and regulating SOC audits and reports. Chapter 3 will contextualize the current situations of these entities and provide a guide to navigate through the profusion of standard acronyms.

The fourth chapter is an analysis of the standards regulating SOC 1 examinations and reports. To achieve that investigation, Chapter 4 will first review the chronicle of third-party assurance standards and then analyze the two standards currently applied: ISAE 3402 and SSAE 18.

The fifth chapter is an in-depth study of the normative similarities and differences between the two standards previously mentioned. Chapter 5 will thus meticulously dissect those in order to bring to light their convergences and divergences.

The sixth chapter is an academic requirement which aims to highlight the ethical dimensions of this thesis subject. Chapter 6 will so use one of the research questions as an introduction point for presenting the audit ethical principles as well as for proposing an open reflection over the independency for SOC auditors.

Finally, the general conclusion will summarize each chapter, recap the findings of all research questions raised as well as provide a closing point to this master thesis on Service Organization Control Reporting. In addition, the author will also set the limitations of the work and propose some general recommendations for audit companies and service organizations.

LITERATURE REVIEW

Through the next six chapters, this master thesis will refer to the managerial literature in an effort to develop the different theorical concepts linked to Service Organization Control. This research work is based on numerous academic, professional, normative and legal sources. The wide variety of references (books, scientific papers, conference papers, newspapers, review magazines, standards, online documents and websites) and their diverse origins were also a requirement this work has constantly endeavored to respond to. The six chapters cite various authors and publications. Here is a sample of the main references mentioned.

Chapter 1 - Service Organization, refers to the work of many academics and professionals to lay the conceptual foundations necessary for our research work. Numerous authors such as Buenaventura (2016), Gulzhanat (2012), Pande (2011), Sen and Shie (2006) or Troacă and Bodislav (2012) to name but a few, have been cited for their theoretical studies on outsourcing concepts. This work has been complemented by online sources and renowned online dictionaries such as the Cambridge Dictionary (2019).

Chapter 2 - Service Organization Control Reporting, mainly refers to online document published by reputed accounting and auditing organizations such as BDO (20018), Deloitte (2018), Moss Adams LLP (2017), PwC (2010) and different audit standards as well.

Chapter 3 - Standard-Setting Organizations, has been completed with information provided by the different standards bodies depicted in the chapter such as the IFAC (2019), the AICPA (2019) and their internal bodies and committees. As in Chapter 2, audit standards have been used to carry out the work.

Chapter 4 - Analysis of ISAE 3402 and SSAE 18, is based on the work of Van Beek and Van Gils (2017), the personal study of the norms regulating SOC reports as well as on the results of the interviews (detailed hereafter) conducted as part of this thesis methodology.

Chapter 5 - Study of the convergences and divergences, is the confluence point of this work providing answers to most of the research questions raised. It refers to the two audit norms previously analyzed in Chapter 4, the AICPA's guide for SOC 1 (2017) as well as the precious interviews carried with audit and business professionals.

Chapter 6 - Ethical dimensions, mainly refers to Code of Ethics for Professional Accountants published by the IESBA in 2018 and develops the ethical aspect of the subject.

METHODOLOGY & RESEARCH QUESTIONS

Methodology

The purpose of this work is making the subject accessible for the general public and at the same time helping academics and professionals to strengthen their understanding of this specific topic. By providing answers to the research questions raised hereafter, the work will fill the praxis gap of the literature. To achieve this objective, this research thesis is based on the following methodology.

The nature of the topic dictates the use of both the available managerial literature (as explained in the previous page) and several interviews conducted with professionals in order to complete the study of the subject. This research thesis is therefore based on a qualitative approach since "no statistical procedures or other means of quantification" (Strauss and Corbin, 1990, pp. 17) are applicable. Conducting interviews is thus an effective way to obtain practical information that is not available in the literature. Two significant types of respondents have been identified:

1. External Auditors. As explained in Chapter 2, they both draft and use SOC reports. Some auditors are specialized in that area and questioning them is an effective way to obtain some technical information and the practical knowledge missing in the literature.

2. Service organizations Managers. They are the ones exploiting SOC reports. Service organizations are at the heart of this work. Interviewing managers in charge of that matter is also an adequate way to obtain information as well as an interesting different perspective than the one presented by the auditors.

The table below presents a summary of all the professionals questioned.

Name	Company	Function	Location	Date
Ted Anderson	EY	Assurance Practice Director	Luxembourg	16/04/19
Bart Kuipers	PwC	Risk Assurance Director	Brussels	03/05/19
Bert Truyman	Deloitte	Risk Advisory Director	Brussels	20/05/19
Jérôme Wagner	Integrale IS	Head of Internal Audit	Liège	06/05/19
Maryline Serafin	Ethias	Head of Internal Audit	Liège	10/05/19
Julien Custine	Aedes	Quality Control Manager	Namur	24/05/19

Table 1 - List of professionals interviewed

All interviews were based on a pre-determined questionnaire. The decision was made to create two different kinds of questionnaires in order to better target the person interviewed depending on whether he/she is an auditor or a service organization manager. The two types of questionnaire are disclosed in *Appendices 1* and *2*. *Appendix 3* provides the profiles of the professionals interviewed. As detailed in this appendix, all interviewees allegedly have a long experience and a good knowledge of SOC audits.

It should also be noted that no respondent had received the above-mentioned document before the interview. The objective was to collect their raw opinion and answers in a face-to-face (whenever possible) discussion with the pre-established questions as guideline. But the interviewer and the respondent were free to discuss some topics peripheral to the general subjects. All the exchanges were recorded in order to facilitate the discussion and to keep a track of the interviews in the most effective way.

Research Questions

As explained in Introduction, the general subject of this research thesis is the 'Service Organization Control Reporting'. But it also aims to study in particular the convergences and divergences between the two standards regulating the SOC 1 reports: ISAE 3402 and SSAE 18. In order to achieve these objectives and set a guideline for this master thesis, several research questions have been formulated:

Q1 - What is the main benefit of a standardized SOC reporting?

Q2 - Do service organizations requesting a SOC report fully understand it?

Q3 - How to explain the current normative situation regarding SOC reporting standards?

Q4 - What are the main similarities between the two audit standards, ISAE 3402 and SSAE 18?

Q5 - What are the main distinctions between the two audit standards, ISAE 3402 and SSAE 18?

Q6 - What is the feasibility of drafting a joint SOC 1 report containing both ISAE 3402 and SSAE 18 requirements?

These six research questions thus defined will be explained and answered through the different chapters of this work. The second chapter, dealing with the different kind of SOC reports will reply to *Q1* and *Q2*. The fourth chapter will be in charge of the assurance standards' evolution and *Q3*. Finally, Chapter 5 will provide a deep study of the convergences and divergences of the norms in order to answer to *Q4, Q5* and *Q6*.

CHAPTER 1
SERVICE ORGANIZATION

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1. Definitions

The best academic approach to initiate this research thesis seems to be a definition process of the central point of this work: a 'service organization'. Dictionaries do not propose, however, any specific definition of the term. The most valuable resources relating to norms vocabulary are standard-setting organizations such as the AICPA[1] or the IFAC[2] (meticulously described and examined in Chapter 3). Those organizations are two major bodies establishing auditing standards as well as defining their terminology (AICPA, 2019a; IFAC, 2019a). Both standard-setting boards define a service organization in their own particular way.

1.1 AICPA definition

According to the AICPA, a service organization is: "The entity (or segment of an entity) that provides services to a user organization that are part of the user organization's information system" (ASB, 2016, SSAE 18, AT-C 320, par. 08, pp. 234). This first definition requires to understand the meaning of the term 'entity', which is defined as "an organization or a business that has its own separate legal and financial existence" by the Cambridge Dictionary[3] (2019). This terminology used by the American Institute focuses on the legal and financial separation of the business bodies involved.

1.2 IFAC definition

The second definition of a service organization is the one defined by the IFAC Board: "A third-party organization (or segment of a third-party organization) that provides services to user entities that are likely to be relevant to user entities' internal control as it relates to financial reporting" (IAASB, 2009, ISAE 3402, par.9, pp. 7). Beside referring to entities, this definition introduces the concept of 'third-party' which is defined by the Cambridge Dictionary (2019) as: "a third person or organization less directly involved in an activity or in a legal case than the main people or organizations that are involved". The key point of the International Federation of Accountants definition is the low level of involvement of the third-party.

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[1] American Institute of Certified Public Accountants
[2] International Federation of Accountants
[3] All definitions from the Cambridge Dictionary (2019) in this work actually come from the online edition of the dictionary. This is the reason why no specific page number is indicated as reference for each definition.

1.3 Common point between these definitions

While being explained in different ways, the major connection between the AIPAC and the IFAC definitions of 'service organization' is the service provided by a third-party entity to a user organization and that service is relevant to the information system[4]/financial reporting[5] of the principal company. The two definitions in fact use different terminologies to encompass the same notion: 'outsourcing'.

1.4 Outsourcing & Subcontracting

Although never mentioned, both standard-setting organizations actually refer to the outsourcing concept, defined by the Cambridge Dictionary (2019) as: "a situation in which a company employs another organization to do some of its work, rather than using its own employees to do it".

Another word often associated to outsourcing is 'subcontracting' which is determined as: "the act of paying an outside person or organization to do work that might normally be done within an organization" (Cambridge Dictionary, 2019).

At first sight these two concepts seem to be perfect equivalents. But subcontracting is in fact a specific form of outsourcing. The main differentiation is related to the length of the relationship between the two entities involved and also to the transmission of ownership or not (Guers, Martin, and Wybo, 2014). They refer to a report published in March 2005 by the French Social, Economic and Environmental Council[6] (2005, pp.92):

> It could therefore be said that subcontracting, unlike outsourcing, partially concerns the provision of a service in a given time and not necessarily over many years and – most importantly – does not imply that the activity was previously undertaken internally. Outsourcing is further distinguished from subcontracting in that it tends to lead to long-term change (by subtraction from the original company to an economic third party) in the boundaries of the company and the structural configuration of its resources. It could be called a 'contractualised' and 'monetised' handover of a function or activity previously included in the internal mode of governance. [translated by Guers et al., 2014, pp.3]

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[4] Refers to the AICAP definition.
[5] Refers to the IFAC definition.
[6] CESE: Conseil Economique, Social et Environnemental de France, named 'Conseil économique et social' until 23 July 2008 and referred in the bibliography as 'Conseil économique et social' because the aforementioned report was published in 2005.

Another main differentiation point is the obligation of result for the service organization in the case of outsourcing. The entity takes the integral responsibility of actions and results toward the outsourcing company. As for a subcontracting deal, the contractor company is accountable for the management and the outcome of the externalized activity (Barthélemy, 2007).

It should be noted, however, that these distinctions between outsourcing and subcontracting, as well as being ambiguous, have no substantive impact on the service organization concept. The condition for the third-party entities to be relevant to the information system/financial reporting of the principal companies is still respected in both cases. This is the reason why this research thesis will not make any more distinction between outsourcing and subcontracting in the following chapters. Both terms will be used in an interchangeable way.

As a preliminary conclusion and at the light of these elements, our preparatory definition process can so depict service organizations as the products of the outsourcing concept itself.

2. Outsourcing as a phenomenon

Troacă and Bodislav (2012) describe outsourcing as a relatively "old" economic phenomenon which started to take place after the Second World War but transformed into a global trend in the 90's. They refer to Aalders' researches (2001) as well as Tim Hindle's book *Guide to Management Ideas and Gurus* (2008) published by *The Economist*. According to the two researchers from the Bucharest Academy of Economic Studies: "the concept of outsourcing came from the American terminology 'outside resourcing', meaning to get resources from the outside. The term was later used in the economic terminology to indicate the use of external sources to develop the business, […]" (Troacă and Bodislav, 2012, pp.52). But this modern management approach has much deeper roots.

2.1 History

The SCRC department of the NCS University[7] retraces the history of outsourcing in its online article *Brief History of Outsourcing*[8] (2006):

The outsourcing journey begins at the Industrial Revolution. At that time, the classic organizational model for a company was to form a large and fully integrated entity. Firms considered that owning, managing and controlling all their assets was the best practice to be

[7] Supply Chain Resource Cooperative department of the North Carolina State University (USA).
[8] The article is introductory to Dr Handfield's research on *Current Trends in Production Labor Sourcing* (2006).

efficient and make profit (SCRC, 2006). In their joint paper *Outsourcing: Past, Present and Future* (2004) Gonzales, Dorwin, Gupta, Kalyan and Schimler explained that: “For the first time in history, the late 1800s saw some countries become nations of abundance, instead of scarcity. Goods of all kinds were provided at a lower price in vast quantities” (Gonzales et al., 2004, pp.1). The two major innovations allowing that flourishing were: the railroad and the telegraph, both connecting people to each other. These innovations enabled indeed corporations to have access to larger markets and at the same time the development of production technologies generated economies of scale. The long-term consequence of these communications and transportation advancements was the rise of new business models. It transcended the formerly existing national markets and resulted in the internationalization of business, slowly paving the way for modern outsourcing (Gonzales et al., 2004).

As previously explained, the technological and macroeconomic elements necessary for the outbreak of global outsourcing were already in place. But the practical results were still marginal. Until after the Second World War subcontracting was still preparing its prominent entrance. During 1950s and 1960s, Western corporations embarked on a wild diversification process in order to profit from economies of scale. Companies expected diversification of their strategy to protect their profits despite the probable resulting management complications (SCRC, 2006).

The race for diversification was launched at full speed and companies battling at the global scale started to lack flexibility in the 1970s and 1980s. Their management structures became too rigid through the past decades. So, in order to tackle that problem and gain agility and creativity, some large corporations started to reorient their strategy on their core business. It was the real blooming of modern outsourcing (SCRC, 2006).

Still according to NCSU’s supply chain department (2006), the subcontracting phenomenon continued and even amplified during the 1990s. Focusing on cost-saving approach, firms went a step further by outsourcing some essential functions for the management of the corporations. These functions were not considered as within the core business. It was the true rise of the service organizations providing services such as human resources, call centers, accounting, data processing, premises maintenance, security, etc. (SCRC, 2006). Gonzales et al. highlighted that: “The movement towards outsourcing in a new global economy would be the natural path of human societies. Practically every nuance of the global economy was to be expected, as a natural outgrowth of previous technological improvements and business movements” (Gonzales et al., 2004, pp.4).

2.2 Global factors

According to Troacă and Bodislav's conceptual study of outsourcing (2012), global factors affecting the world economy and creating incentives for outsourcing can be identified as the following:

1. Increasing globalization undoubtedly drives corporations to constantly be more efficient and innovative to gain or keep their competitive advantages;

2. The cost of performing information systems has increasingly increased. Human resources selection is a crucial point. Highly trained and skilled collaborators are required;

3. Intense competitiveness on the market (itself multiplied by globalization) pushes firms to deliver products and services on time and within the budget to stay efficient; and

4. Consumers' preferences and requirements constantly change, making the global demand volatile.

Still according to Troacă and Bodislav (2012), some corporations decide to face the challenges mentioned above by transferring "the responsibility of having specialists, facilities and equipment to a third party, localized mostly in developing countries where there is great potential for human and multiple opportunities" (Troacă and Bodislav, 2012, pp.54). Outsourcing allows companies to reduce the time for developing, implementing and managing non-core projects, all at minimal costs.

Furthermore, Bang and Markeset (2017) developed in their study *Identifying the Drivers of Economic Globalization and the Effects on Companies' Competitive Situation*, what they identified as the 'pressure effects', 'location effects' and 'size effects' of globalization, all working in conjunction and creating a 'competition loop'. They concluded than globalization and its indirect outcomes has led to an: "increased use of outsourcing to relocate activities to the outside of the company or to other low-cost countries" (Bang and Markeset, 2011, pp.8) for the last 20 years.

2.3 Different types of outsourcing[9]

Deciding to outsource one of its activities is already a considerable and uneasy step for a company. But deciding where it should be done means taking a further step. Here are the different conceptual types of outsourcing encompassed within this umbrella term.

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[9] A schematic illustration of the different type of outsourcing is displayed in *Appendix 4*.

2.3.1 Offshoring

Also known as offshore outsourcing, offshoring is defined by the Cambridge Dictionary (2019) as: “the practice of basing a business or part of a business in a different country, usually because this involves paying less tax or other costs”. As explained on their website by the software outsourcing advisory company Daxx[10] (2016), offshoring is characterized by moving an activity to a distant location in order to “benefit from lower labor costs, more favorable economic conditions, time zones, or a larger talent pool”. Still according to Daxx, Western firms should count a minimum of 5- or 6-hours’ time difference to have access to that kind of labor market. They claim that elongated time differences can indeed be convenient for companies looking for “uninterrupted tech or customer support, constant updates and maintenance work”.

The *2017 A.T. Kearney Global Services Location Index*[11] provides a list of the most attractive outsourcing locations around the world. This index takes into consideration 3 main factors of attractiveness: Financial, People skills & availability as well as Business environment. The most attractive outsourcing locations TOP 10 is presented here below. Please note that the whole list is available in *Appendix 5*.

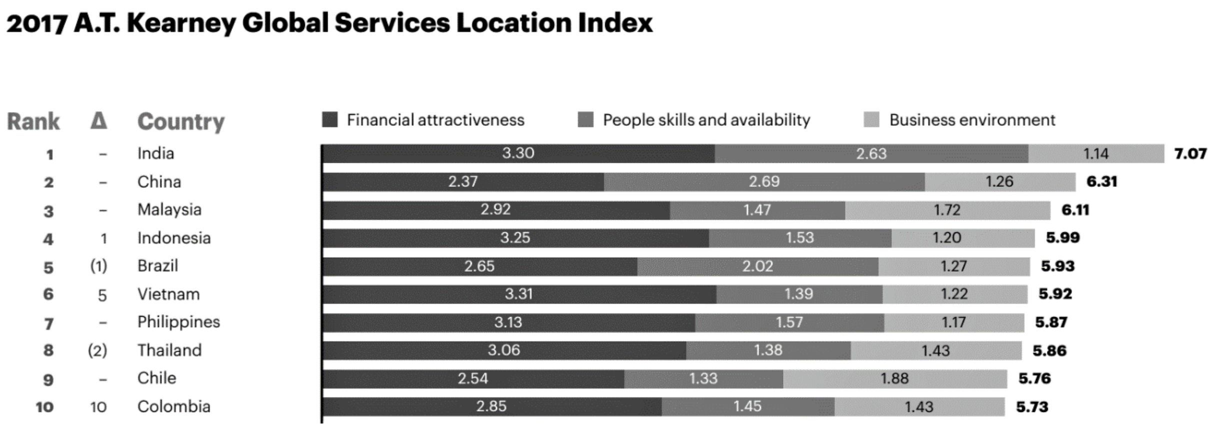

Figure 1 - List of the Top10 countries ranked by outsourcing attractiveness

Source: A.T. Kearney, Global Services Location Index (2017, pp 11).

As detailed above, India, China, Southeast Asian countries as well as South American countries are the most attractive locations for companies to subcontract an activity. All these locations are considered as offshore outsourcing from a Western perspective.

[10] Daxx is a software development company founded in Amsterdam in 1999 which is now specialized in IT outsourcing advisory as well as technical consulting. They collaborate with customers from 17 countries.
[11] This index is published yearly by A.T. Kearney, an US-based global management consulting company focusing on operational and strategic matters.

Lacity and Willcocks (2012) estimated offshore outsourcing to represent an $80 to $100 billion global industry. In addition to that, offshoring has an estimated 8% to 12% growth per year from 2013 to 2018 (Sobinska and Willcocks, 2016).

On the TaskUs[12] website, Buenaventura (2016) explains this phenomenon through the 2 main advantages of offshoring:

1. “Sunrise-to-Sunrise Service”: Employees have to sleep but our modern global economy never stops. Nowadays customers expect more and more organizations to be continuously accessible. Offshoring allows companies to expand their customer care service to a round-the-clock one; and

2. Low Labor Costs: Strategic outsourcing in countries offering a disproportionately low-cost labor market but with a large pool of talented workers is a good way for companies to respect their annual budgets and projections. Companies can concentrate their budget and investments on core activities while judiciously selecting non-core competencies, which are too expensive for processing offshore.

2.3.2 Nearshoring

Also known as nearshore outsourcing, nearshoring is defined by the Dictionary of International Trade (2015, pp.132-133) as: “The transfer of business processes to companies in a nearby country, where both parties expect to benefit from one or more of the following dimensions of proximity: geographic, temporal (time zone), cultural, linguistic, economic, political, or historical linkages” The specialized dictionary also adds: “Nearshoring is a derivative of the business term offshoring. In contrast, nearshoring means that the business has shifted work to a lower cost organization, but within its own region, broadly defined” (Dictionary of International Trade, 2015, pp.132-133).

The software outsourcing advisory company Daxx (2016) explains the benefit of nearshoring by the fact that the nearer two countries are to each other, the more their cultural similarity is high. The higher level of cultural homogeneity indeed makes communication more fluid compared to offshore outsourcing. The international consulting company A.T. Kearney points out in its *2017 Global Services Location Index* that: “[…] nearshore location is typically selected as the work is fairly well integrated with the operations of the companies, and proximity allows the nearshore workers to develop a better understanding of client needs”

[12] TaskUs is an American-based international outsourcing organization founded in 2008.

(2017, p.4). Neighboring nations with significant labour cost gap within a same continent are key elements of the nearshoring concept.

The *2017 Global Services Location Index,* for examples ranked Poland 12th and explains that as many other nearshore locations, Poland focuses essentially on basic finance and accounting tasks. Bulgaria is ranked 15th, the Czech Republic 16th, Romania 18th and Hungary 26th. These countries are definitely key nearshoring destinations for West European companies, the same way Mexico (ranked 13th) is for the United States. Please note that the whole ranking is available in *Appendix 5*.

2.3.3 Onshoring

Also known as homeshoring[13] or reshoring, onshoring is defined by the Oxford English Dictionary (2019) as: "The practice of transferring a business operation that was moved overseas back to the country from which it was originally relocated."

As explained by Buenaventura, (2016), the global concept of outsourcing is commonly seen by non-business people as being a synonymous of relocating activities to a distant country at low labor costs. This is partially true in the cases of offshore and nearshore outsourcing. However, onshoring is a third outsourcing concept for which the subcontracting takes place within national borders.

On the TaskUs website, Buenaventura (2016) explains the 2 main advantages of onshoring:

1. Recruitment Considerations: Finding human resources within the national borders allows companies to have a direct access to the "talent pools of local universities" as well as hiring employees sharing the same cultural and linguistic background with final users; and

2. Being in the time zone as well as reduced travel costs are also significant advantages of onshoring compared to nearshore and offshore outsourcing.

There is also another explanation for this "reversed outsourcing". This reason is purely economic. Salary gap within the national borders is the key reason making onshoring possible. Taking IT onshoring as a practical example to elaborate her research and findings, Aditya Pande explains in the March 2011 issue of the prestigious Harvard Business Review that: "Areas such as northern France; eastern Germany; and the Great Plains, Appalachian, and southern regions of the United States contain pools of highly skilled workers who are less expensive than those

[13] Homeshoring can also describe: "the practice of employing people to work from their homes rather than in a company's office or factory" (Cambridge Dictionary, 2019).

in big Western metropolitan areas" (Pande, 2011, pp.30). Onshoring is now seen by officials as a new trend that could "generate significant job growth in the developed world", begins Pande. In Belgium, the Walloon Region plunged into de-industrialization almost two decades before the other Western countries as Barlow explained in his researches (2018). According to the Belgian Federal Institute of Statistics *Statbel* (2018), the average gross monthly wage[14] was 5,6% lower in Wallonia than in Flanders for the year 2016.

However, Pande (2011) also warns that the industrial growth and the economic benefits induced by onshoring tend to be unsustainable on the long term. She demonstrates that latecomer companies deplete the supply of qualified workers, making wages increase and so the initial reason for onshoring, vanishes. In her article, Pande (2011) also provides three steps to follow in order to avoid the overheating of the local labor market:

1. Wise location choice: Arriving first in the pre-defined location is the key element. Areas providing a quality education offer as well as a sufficient quantity of local workers, are highly recommended. Most governments also offer financial incentives to companies establishing or creating activity in job-starved regions. Such subsidies can help firms reaching their profitability threshold quicker. It should be noted, however, that government incentives can be abolished in the course of time;

2. Right selection of the 'onshored' activity: Onshoring should only concern jobs that necessitates specific knowledge or skills of "legacy systems", which will protect the selected area's economic competitiveness over the long haul; and

3. Keep your talents: Implementing an employee retention program allows companies maintaining their workers entirely committed and guarantee their career development. Such retention program can also encompass promoting the advantages of small-town life and supporting internal tasks rotation for employees wishing to do so. The goal is to reduce the wage pressures arising from higher-paying regions as long as possible.

2.4 Advantages and goals

The past section has described the different types of outsourcing and has already detailed their specific advantages. The current section, however, describes the general major benefits resulting from outsourcing. The goals companies expect to achieve by adopting this strategy are listed in *Deloitte's 2016 Global Outsourcing Survey*. This survey conducted by the global

[14] Calculated on a full-time employment basis (Statbel, 2018)

accounting and advisory organization *Deloitte*, covers the whole outsourcing spectrum and respondents are mostly large corporations[15], representing all kind of sectors[16] and having activities all around the world[17]. The Table 1 below displays the reasons why companies outsource one or multiple parts of their operations.

Why do companies outsource?	%
1. Cost Cutting Tool	59%
2. Enables Focus on Core Business	52%
3. Solves Capacity Issues	47%
4. Enhances Service Quality	31%
5. Access to Intellectual Capital	28%
6. Critical to Business Needs	28%
7. Manages Business Environments	17%
8. Drives Broader Transformational Change	17%

Table 2 - Identifying the 8 main advantages organizations have to outsource

Source: Deloitte, 2016 Global Outsourcing Survey (2016, pp.5).

In the academic field, Gulzhanat (2012) conducted, a literature review on the outsourcing concept and detailed the major benefits of subcontracting. She supports her point by referring to multiple academic authors and her list corresponds almost to the *Deloitte's 2016 Global Outsourcing Survey* results:

1. The main and initial goal of outsourcing has always been cost savings. Companies in need of material or human resources decide to outsource when realizing that resource is too complicated or not required on a full-time basis (Axelrod, 2004). Gulzhanat takes the example of a medium-size firm looking for some technical support and know-how. If hiring and training a computer engineer is too expensive, the company will outsource that operation (Gulzhanat, 2012). The software outsourcing advisory company Daxx (2016) more particularly put the

[15] 85% of the respondents are from corporations making more than $1 billion in annual revenues (Deloitte, 2016).
[16] The survey covers over 25 different sectors (Deloitte, 2016).
[17] Respondents have activities in the following regions: 90% North America, 65% Europe, 56% Asia Pacific, 50% South America, 40% Middle East, 33% Africa (Deloitte, 2016).

stress on nearshore and offshore outsourcing advantages: lower operating costs, lower wages, and lower infrastructure costs;

2. Subcontracting non-central operations to service organizations allows companies to focus on their core business. They can reorient their value proposition and boost their competitive advantage (Liao, 2002);

3. A direct access to a global pool of talents. Without having to process long recruiting procedures, companies can efficiently profit from the highly skilled collaborators of the third-party organization as well as their investments and innovations. Local labour market shortages are solved by outsourcing (McIvor, 2005);

4. Service organizations contribute to create economies of scale, increasing performance for the service takers. They also provide a higher level of operational experience due to the specialization of the service providers (Allen, Gabbard and May, 2003); and

5. Agility is also a key outsourcing advantage. Outsourcing allow companies to be more flexible and responsive to the current dynamic business environments which is not possible with large and rigid structures (Gulzhanat, 2012).

2.5 Disadvantages and risks

Subcontracting, however, also has its stream of disadvantages. This section aims to list and describe all the possible risks companies are taking by transferring operations to a third-party organization:

1. As external stakeholders, service organizations may not sufficiently understand the outsourcer environment. The further the third-party is located, the bigger the environmental gap is. This lack of knowledge will require more collaboration efforts, patience as well as a wise communication (Troacă and Bodislav, 2012);

2. For each outsourcing engagement, company seeking for an external service signs an agreement with the outsourcing organization. This contract defines the scope and the details of the service provided. Any additional work will lead to additional fees. The definition of the targets should be detailed with scrutiny after a serious analysis (Gulzhanat, 2012; Troacă and Bodislav, 2012);

3. Outsourcing ineluctably means losing control over the subcontracted operations (or at least part of it). The remaining level of control depends on the existing business leverage, the

negotiation skills of the managers and the exact terms of the outsourcing agreement signed (Gulzhanat, 2012);

4. The service organization and the service taker need to be able to communicate if they want avoid language barriers. Miscommunication can lead to low-quality achievements and wasted efforts for both parties (Daxx, 2016);

5. Security and confidentiality are big issues in the business world. But it takes a higher degree when it concerns transferring operations to a third-party organization. Especially in the financial services sector, which requires information segregation between investment bankers away from brokers or traders for example (Jiang, Klein, Tesch and Chen, 2003);

6. In relation with the first point, differences in work habits as well as cultural environment dissimilarities may disrupt the productivity of the service taker (Daxx, 2016); and

7. The possible long distances between the company and the subcontracting party make business trips costlier and exhausting for the managers in charge (Daxx, 2016).

According to Troacă and Bodislav, results of outsourcing are anything but immediate: “Most organizations had a 20% decline in labor productivity in the first year of an outsourcing contract, mainly because of time spent on knowledge transfer to the outsourcing provider.” (2012, pp.56).

2.6 BPO / KPO

As seen in the previous sections, outsourcing is a complex subject. But its practical implementation can conceptually be split into two major categories: BPO and KPO (Rouse, 2018). They are the two main facets of the outsourcing prism. The following paragraphs aim to provide a theoretical understanding of the services classes that can be subcontracted and their concrete distinctions.

2.6.1 Business Process Outsourcing

Business Process Outsourcing, also known under the BPO acronym is defined by the finance education dedicated website Investopedia (2018) as: “a method of subcontracting various business-related operations to third-party vendors”. Under this definition, the subcontracting service organizations only support predetermined business processes (in their totality or not). BPO is in fact almost similar in its essence to the general outsourcing concept.

BPO historically finds its roots in the production industry. According to Rouse (2018), specialized companies were subcontracted by manufacturers to deal with precise process parts of their supply chain which were out of their core activity. Tompkins (2005) explains indeed that "routine and non-strategic" processes are easier to subcontract than complex activities or the one directly affecting a firm's results. This led to the outsourcing phenomenon detailed in and the different types of subcontracting described.

As explained by Nonaka and Toyama in 2003: "Business processes are constantly evolving and are strongly embedded in the culture and identity of the firm" (as cited in Sen and Shie, 2006). Rouse (2018) also explains that companies can employ outsourcing for either front-office or back-office functions as well as relying on service companies for either limited activities (i.e., payroll) or subcontracting a complete working department (i.e., human resource). Please refer to *Appendix 6* to obtain a summary table of BPO examples.

What started with manufacturing industry outsourcing has evolved over the time. BPO now concerns all kinds of industries, leading to the emergence of a new outsourcing category.

2.6.2 Knowledge Process Outsourcing

According to Sen and Shie (2006), due to the progressive booming complexity of outsourced processes available, companies which were used to transferring their basic non-primary operations started to discover knowledge and information transfers as well. This recent phenomenon is commonly called Knowledge Process Outsourcing or KPO, which is defined by Investopedia (2018) as: "the outsourcing of core, information-related business activities, meaning that knowledge and information-related work is carried out by workers in a different company or by a subsidiary of the same organization".

Knowledge Process Outsourcing was originally a subgroup of BPO, in other words: a logical extension. But KPO involves more expertise, knowledge and skills. This particularity allowed it to become a distinct outsourcing category. A summary comparison table between BPO and KPO is presented in *Appendix 7*. As also explained on Investopedia (2018), high-skilled workers from countries where the wages are substantially low, are the key factors allowing KPO for companies facing a possible shortage of skilled professionals in their own location and all this at a low cost.

Sen and Shie already forecasted a rapid growth for KPO in 2006. According to them, the ability provided by KPO "to leverage knowledge skills and assets globally" (pp.153) is higher than the risk carried. They highlighted the fact that companies will focus more on knowledge as a fundamental success factor (fuelled by the competition within the industries) Sen and Shie (2006) also revealed that trust and relationship between companies and third-party service providers will be the key drivers for success. Please refer to *Appendix 6* to obtain a table of concrete examples of emerging functions targeted by Knowledge Process Outsourcing.

Finally, it should be noted that LPO (Legal Process Outsourcing) and RPO (Research Process Outsourcing) are often mentioned by practitioners as KPO main sub-groups. Professionals also sometimes use the term ITO (Information Technology Outsourcing) as a third large category of outsourcing alongside BPO and KPO.

3. Practical examples

Now that the subject of this Chapter: 'service organization', has been defined and the theoretical approach of 'outsourcing' completed, this research work must now move onto a more practical approach and provide some examples of usual service organizations. Here is a non-exhaustive list supported by short descriptions of the most frequent types met on the business field.

3.1 IT Departments

The Cambridge Dictionary (2019) defines IT outsourcing as: "the practice of using an outside organization to provide computing services, rather than the company's own employees". IT or Information Technologies encompasses: "anything related to computing technology, such as networking, hardware, software, the Internet, or the people that work with these technologies" (Tech Terms, 2019). Companies generally outsource their IT department to focus on their strategic activities, increase the IT service quality, facilitate their access to new technologies, to save staff costs (mainly through offshoring) and decrease the obsolescence risk (Gonzalez, Gasco and Llopis, 2008).

3.2 Manufacturing

The finance education dedicated website Investopedia (2018) defines manufacturing as: "the processing of raw materials into finished goods through the use of tools and processes. Manufacturing is a value-adding process allowing businesses to sell finished products at a premium over the value of the raw materials used". As seen earlier in this chapter, outsourcing specific manufacturing operations to specialized firms is the historical origin of subcontracting.

The Peerless Research Group [18](PRG) published in 2016 a study explaining that 84% of 94 the organizations surveyed (mainly large logistics and supply chain companies) outsource at least a portion of their manufacturing production. Still according to PRG, 51% of the respondents specify doing so to rely on the better expertise of the service organization.

3.3 Clearing Houses

Clearing houses are intermediary bodies between financial instruments sellers and buyers. Investopedia (2018) defines clearing houses with more precision as: "an agency or separate corporation of an exchange responsible for settling trading accounts, clearing trades, collecting and maintaining margin monies, regulating delivery of the bought/sold instrument, and reporting trading data". The website also adds: "Clearing houses take the opposite position of each side of a trade. When two investors agree to the terms of a financial transaction, such as the purchase or sale of a security, a clearing house acts as the middle man on behalf of both parties" (Investopedia, 2018). Clearing houses help to make the financial markets more efficient and stable by smoothing transaction operations and ensuring their correct execution (Investing Answers, 2019).

3.4 Transfer Agents

A Transfer Agent (TA) is defined by Investopedia (2018) as "a trust company, bank or similar financial institution assigned by a corporation to maintain records of investors and account balances. The transfer agent records transactions, cancels and issues certificates, processes investor mailings and deals with other investor problems (e.g., lost or stolen certificates)". A transfer agent's main mission is to: "ensure that investors receive interest payments and dividends when they are due and to send monthly investment statements to mutual fund shareholders" (Investopedia, 2018). Recording the continuous changes in bondholders and shareholders is a highly time-consuming activity which makes TAs essential behind-the-scene operators (Investing Answers, 2019).

3.5 Third-Party Administrators

Third-Party Administrators, also known as Third-Party Claims Administrators (TPCA), are service organizations processing claims on behalf of other companies. This kind of third-party organizations are frequently employed by employee benefit providers and insurance companies to manage their claims. Retirement plans as well as flexible spending accounts are also usually

[18] The Peerless Research Group is a US research company serving the supply chain market (PRG, 2019).

processed by TPCA (Investopedia, 2018). Third-Party Administrators also take care of billing services, subrogation expertise and data analytics. Any kind of claim is conceivable: “general liability, water damage, restoration, construction defect, automobile, property and casualty, product liability, professional liability and employment practices to name a few” (Harman, 2015). In addition to cost savings, outsourcing claims management allows companies to make sure claims are treated on time by an expert third-party so they can stop worrying about it (Harman, 2015). But the main problem arises from the loss of control over the follow-up of the demands which can lead to incidents (IRMI[19], 2008).

3.6 Payroll Service Providers

Payroll Service Providers (PSP) are service organizations dedicated to the management of employee’s salaries, time and attendance, deposit accounts, payroll taxes, benefits plans, etc. (IPS, 2016). In its annual brochure over outsourced payroll, PwC (2014) explains that payroll processes represent a significant part in the budget for companies. Increasingly complex and stricter national laws and regulations are pushing firms to delegate this task (or part of it) to third-party entities to ensure the full accuracy and reliability of the process.

3.7 Trust Administrators

Trust Administrators are legal third-party entities appearing as: ” a fiduciary, agent, or trustee on behalf of a person or business for the purpose of administration, management and the eventual transfer of assets to a beneficial party” (Investopedia, 2019). The finance education dedicated website also explains that trust service organizations do not have any ownership on the assets managed on behalf of their clients but are legally responsible for the proper management of these investments (2019).

3.8 Data Centers and Call Centers

Services provided by data centers and call centers are nowadays commonly outsourced as well.

[19] International Risk Management Institute

CHAPTER 2
SERVICE ORGANIZATION CONTROL REPORTING

1. Why reporting on service organization control?

All over the world, companies focus more and more on risk and the most efficient way to manage it. One of the reasons is that internal and external third-party stakeholders require more transparency and trust than ever. Many firms dedicate considerable financial and human resources on risk management to deliver the assurance required from stakeholders (BDO, 2018; PwC, 2019). For companies outsourcing a part of their business process to a service organization, the need of risk management and assurance is significantly high. Such daily outsourced operations have undoubtedly led to service organizations becoming increasingly integrated into their user companies. But firms cannot oversee the internal control effectiveness, and so the risk management, of their third-party collaborators. (Deloitte, 2018).

On the IS Partners[20] website, Salomon (2018) explains that service organizations can obtain the assurance required by performing a Service Organization Control (SOC) audit and providing the resulting report to their user organizations. Third-party companies outsourcing services for another firm may indeed be interested into establishing trust and confidence over the quality of their internal control to their clients. In that case, a SOC audit is the accurate way to obtain "assurance that the controls surrounding […] services are designed effectively, and in some cases, operating effectively" (Salomon, 2018).

In its publication over third-party assurance reporting, the consulting and auditing organization BDO details the major reasons why a service organization should commission an audit company for a SOC report: (BDO, 2018)

1. Customer expectations: Customers want to be reassured that their business is taken care of and they are not running additional risks, trusting part of their business and data to your organization. Providing a SOC report to your customers will significantly increase customer reliance and the perceived service professionalism; and

2. Competitive pressure: Service companies can use their SOC report as a commercial argument to attract new clients on a competitive market. It is a real transparency and trust testimony

[20] IS Partners is an American service company founded in 2004. The company provides accounting and auditing services. IS Partners is specialized in SOC auditing as well as IT assurance (Bloomberg, 2019; IS Partners, 2019).

provided by an independent entity. As are the quality certificates, SOC reports become increasingly indispensable on competitive markets.

3. Compliance with standards & regulation: Companies have to apply different national and international regulations. Regulators can require service organization to provide a SOC report. But in most cases, it will be the service organization deciding to ask for the report. As already seen, auditors have to conduct their third-party assurance engagements in compliance with the ISAE 3402 and SSAE 18 existing standards (analyzed in Chapters 4 and 5);

In conclusion, service organization control reporting is similar to all other services provided by auditing organizations. Auditors sell assurance to their clients who can then sell it to their own customers. According to the auditors interviewed, SOC reports can be seen as a marketing certification tool used by service organizations to prove to their clients that they can rely on their internal control. But this topic will be further discussed in the Research Questions section.

2. Who is involved?

As seen in Chapter 1, SOC reporting may be required in third-party outsourcing situations. In its publishing over third-party assurance reporting, Deloitte (2018) depicts the five[21] different kinds of organizations which may be involved within the SOC reporting environment. The illustration above is a classic example of how these bodies interact with each other.

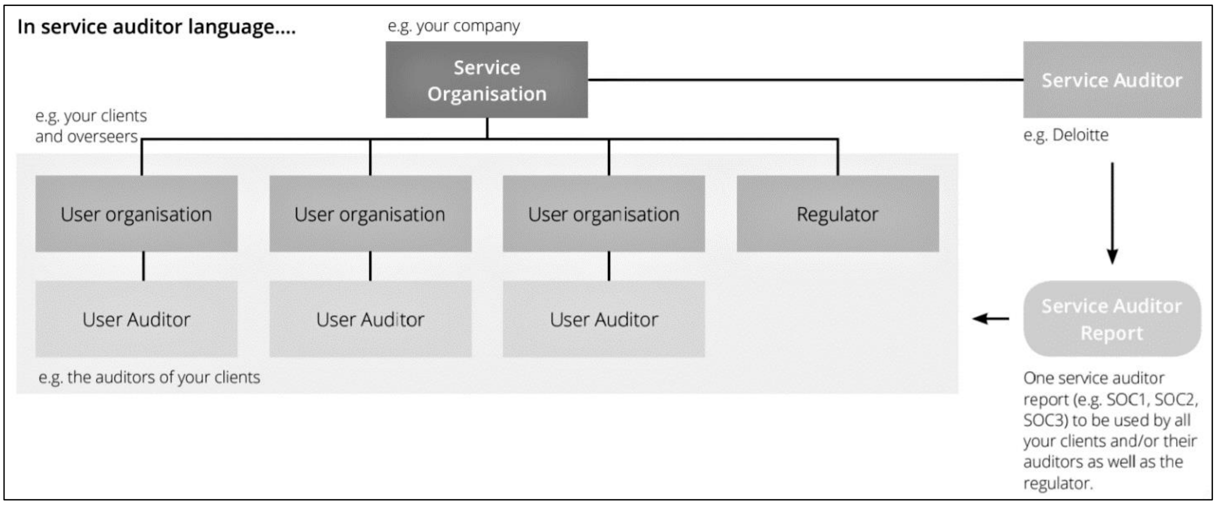

Figure 2 – Parties involved in a SOC reporting environment

Source: Deloitte, Managing Risk from Every Direction (2018, pp.4).

[21] The exact number of entities having access to the SOC report published by the service auditor depends on the nature of the SOC report (SOC 1, SOC 2 or SOC 3 as explained in Section 4).

2.1 Service Organization

As already explained in Chapter 1, the IFAC defines[22] a service organization as: “A third-party organization (or segment of a third-party organization) that provides services to user entities that are likely to be relevant to user entities’ internal control as it relates to financial reporting” (IAASB, 2009, ISAE 3402, par. 9, pp. 7). This entity is the gravitational point of the service organization control, the one addressed in the report. Sometimes, a subservice organization which is defined as: “A service organization used by another service organization to perform some of the services provided to user entities that are likely to be relevant to user entities’ internal control as it relates to financial reporting” (IAASB, 2009, ISAE 3402, par. 9, pp. 7) has to be taken into consideration.

2.2 Service Auditor

The service auditor is: “A professional accountant in public practice who, at the request of the service organization, provides an assurance report on controls at a service organization” (IAASB, 2009, ISAE 3402, par. 9, pp. 7). It is the entity in charge of performing to assurance engagement audit and releasing the SOC report.

2.3 User Organization

The user organization is defined as: “An entity that uses a service organization” (IAASB, 2009, ISAE 3402, par. 9, pp. 8). The user organization is the one deciding to outsource a part or more of its business process to a third-party entity, the service organization.

2.4 User Auditor

The user auditor is: “An auditor who audits and reports on the financial statements of a user entity” (IAASB, 2009, ISAE 3402, par. 9, pp. 8). According to Deloitte (2018), external auditors strongly rely on the SOC report to prepare the annual financial statement audit of the user organization.

2.5 Regulator

In specific cases, national or international regulatory bodies can also be interested by the SOC report published by the service auditor. The internal information contained within the report have indeed a significant value for regulating authorities (Deloitte, 2018).

[22] In this section, the decision was taken to only use the definitions proposed by the IFAC and not the AICPA. The first reason is to avoid overloading the work. And the second reason is that the IFAC being the parent-entity of the AICPA, its definitions are supposed to have a larger scope.

3. What has to be audited?

Service Organization Control is a concept dedicated to the audit field. This section aims to explain what specific control this kind of audit exactly refers to.

From a normative point of view, the IFAC defines[23] the controls of a service organization as: "Controls over the achievement of a control objective that is covered by the service auditor's assurance report" and describes such control objective as: "The aim or purpose of a particular aspect of controls. Control objectives relate to risks that controls seek to mitigate" (IAASB, 2009, ISAE 3402, par. 9 (d) and (c), pp. 5).

These two definitions, however, only provide a vague idea of what these internal controls are. This is the reason why a paragraph of the IFAC also explains that controls at the service organization include: "[...] aspects of user entities' information systems maintained by the service organization, and may also include aspects of one or more of the other components of internal control at a service organization" and provides examples of aspects such as: "[...] control environment, monitoring, and control activities when they relate to the services provided" (IAASB, 2009, ISAE 3402, par. A3, pp. 23).

Based on these definitions, a SOC report aims to provide third-party assurance on: the structure and suitability of a service organization internal control system, seeking to mitigate the risk over the services provided. All types of processes applied by the service organization to control, or oversee the risk arising from the services they provide are concerned.

On the Lindford & Co[24] website, Pierce (2017) takes the example of a payroll service provider. A SOC audit would examine that any process controling the payroll service (such as payment checking for instance) is appropriately designed and efficiently operating.

As the next section will meticulously explain it, the exact extent of this control system notion will depend on the class of SOC report addressed:

- SOC 1 reports aim to examine the "controls and risk management procedures relating to financial reporting" of the service provider; and
- SOC 2 and 3 reports aim to look at five Trust Services Principles: security, availability, processing integrity, confidentiality and privacy (Mazars, 2019).

[23] In this section also, the decision was taken to only use the definitions proposed by the IFAC and not the AICPA. The first reason is to avoid overloading the work. And the second reason is that the IFAC being the parent-entity of the AICPA, its definitions are supposed to have a larger scope.
[24] Lindford & Co is an US-based independent auditing firm specialized in TPA engagements.

4. How reporting it?

Service Organization Control (SOC) audit also known as Third-Party Assurance (TPA) leads to a final report (BDO, 2018). Service auditors are indeed requested by their clients (the service organizations) to obtain a standardized document called ‘SOC report’. The auditor will provide some parts of the reports and the company will produce some other parts. Three kinds of SOC reports exist with each their own characteristics (Deloitte, 2018; Moss Adams LLP, 2017).

4.1 SOC 1 Report

Purpose: The SOC 1 report investigates the ‘internal controls over financial reporting’ of the determined service organization. This kind of report is intended for service providers whose activity has a material impact on the financial statements of their clients (KPMG, 2012). According to all auditors interviewed and the research conducted, SOC 1 reports are the most requested kind of TPA reports due this specific element of impact on financial statements.

During a SOC audit, the management of the organization asserts that certain controls are in place. The service auditor then performs several test procedures to verify the veracity of the assertions and issue an independent opinion based on the results.

Content: In accordance with the auditing standards ISAE 3402 and SSAE 18, the SOC 1 report has to include the following elements:

1. Service auditor’s opinion letter: Also known as the independent auditor’s report, it encompasses the scope and the type of the audit performed as well as the auditor’s final opinion. That opinion can either be unqualified or modified/qualified (Pierce, 2017).

2. Management assertions: The management of the service organization has to deliver several statements regarding its control procedures about which the auditor will express his/her opinion. The exact content required in these assertions slightly differ from a Type I or Type II report (please refer to Section 3.1.1 and 3.1.2) (Deloitte, 2018; Pierce, 2017).

3. System description: That description includes all elements of the service relevant to the user entities such as the organization’s “processes, policies, procedures, personnel, and operational activities”. This document is provided by the service organization (Pierce, 2017).

4. Tests of controls description and its results: Section used by the auditor to describe the controls tested, the testing procedures and the results of that examination (Pierce, 2017).

5. Additional information: Some extra information from the management about relevant processes not tested can be disclosed in the report as well (Deloitte, 2018; Pierce, 2017).

<u>Standards</u>: The mandatory content listed above and the general requirements for conducting a SOC 1 report are regulated by different engagement audit standards:

1. The International Standard on Assurance Engagements (ISAE) 3402 at the international level, published in 2009 and in force since 15 June 2011 (IAASB, 2009, ISAE 3402); and

2. The Statements on Standards for Attestation Engagements (SSAE) 18 is the standard developed in the United States of America. Issued in 2016, SSAE 18 officially replaces the former standard SSAE 16 since May 1, 2017 (ASB, 2016, SSAE 18).

The Canadian Standard on Assurance Engagements (CSAE) 3416 is also a well-recognized standard regulating SOC 1 reports but this standard is a copy of SSAE 18 and its application is almost exclusively restricted to Canada and companies looking for assurance to provide to Canadian companies (according to the interview realized with the auditor Ted Anderson).

The general topic of this research thesis is indeed Service Organization Control and its reporting. But as already explained in the introduction of the work, this thesis aims to analyze the convergences and divergences of the two standards mentioned above, ISAE 3402 and SSAE 18. The standard-setting environment of these norms is treated in Chapter 3 and their analysis in Chapters 4 and 5.

<u>Audience</u>: The distribution of SOC 1 reports is restricted to user organizations as well as their auditor (Deloitte, 2018).

4.1.1 Type I

In accordance with ISAE 3402 and SSAE 18, the Type I report is used to report the system of the service organization at a specific point in time (KPMG, 2012). In this report, the service auditor expresses his/her opinion on:

1. The accuracy of the management's description of its system. Is the designed and implemented system fairly presented as of a specific date; and

2. The suitability of the control objectives desrcibed in the management's description of its system as of a specified date. (IAASB, 2009, ISAE 3402, par. 9, pp. 6; ASB, 2016, SSAE 18, sect. 320, par. 08, pp. 233).

According to the auditors interviewed, the Type I report is typically used as a screenshot for organization going through a SOC audit for the first time as well as for the last SOC audit when a company decides to cease. It is less expensive than a Type II since no extensive sampling has to be performed to test the whole period of time. Regular Type I is also possible but it is rare.

4.1.2 Type II

In accordance with ISAE 3402 and SSAE 18, the Type II report is used to report the system of the service organization at a defined period of time (generally 6 to 12 months). In this report, the service auditor expresses his/her opinion on the same elements than the Type I report, plus a specific third element, the operating effectiveness of the control system:

1. The accuracy of the management's description of its system. Is the designed and implemented system fairly presented throughout the period;
2. The suitability of the control objectives stated in the management's description of its system throughout the period; and
3. The effectiveness of the control is in accordance with the control objectives stated in the management's description for the examined period.

In addition to that opinion, the Type II report also has to contain a description of the tests of controls and the detailed results of these testing.

(IAASB, 2009, ISAE 3402, par. 9, pp. 6-7 ; ASB, 2016, SSAE 18, sect. 320, par. 08, pp. 234).

Since the Type I report is mostly used for first and last engagements, Type II is so the most commonly used type of SOC report overall.

4.2 SOC 2 Report

<u>Purpose</u>: In contrast to the first report, SOC 2 aims to report on non-financial processing. This report provides assurance on the system selected by measuring the effectiveness of its internal controls in regard to one or more of the five Trust Services Principles (TSP) developed by the AICPA (KPMG, 2016; Moss Adams LLP, 2017):

1. Security: Control that no unauthorized access (digital or physical) can break into the system. Limiting its access prevent the organization from potential resources robbery, system abuses, misuses of software, or any possible destruction, alteration or disclosure of information (PwC, 2010);

2. Availability: This principle concerns the system accessibility for processing, monitoring, and maintenance. It however does not refer to the functionality of the system (PwC, 2010);

3. Confidentiality: Refers to the protection of confidential information as commuted and agreed as well as the ability of the system to defend itself. It should be noted that confidential information can significantly change from one business to another. Agreements and regulations permit to determine what is confidential. (PwC, 2010);

4. Processing integrity: The integrity of the process requires to control if: “the system performs its intended function in an unimpaired manner, free from unauthorized or inadvertent manipulation” (PwC, 2010, pp.21); and

5. Privacy: This principle aims to control the perfect conformity of collection, use, and disclosure of personal information. It also controls that documents are destroyed in accordance with the privacy notice of the organization (PwC, 2010).

The *Appendices 8* and *9* provide an interesting summary of those principles and further details.

Content: The SOC 2 report includes the same elements as the first report: the service auditor’s opinion, the management assertion, a description of the system, a description of the testing and its results of the examination as well as some additional information (Deloitte, 2018).

Standards: The auditing standards regulating SOC 3 are ISAE 3000 at the international level and AT Section 101 (from SSAE 10, 11, 12 and 14) if the US standard is required (Deloitte, 2018; Moss Adams LLP, 2017).

Types: As the SOC 1 reports, Type I and II differ by their duration (a specific point in time for Type I or a defined period of time for Type II) (Deloitte, 2018).

Audience: As for SOC 1 reports, the distribution of SOC 2 reports is restricted to user organizations as well as their auditor. But specific parties can request the report as well (Deloitte, 2018).

4.3 SOC 3 Report

Purpose: This report is also based on Trust Services Principles (explained above and in *Appendices 8* and *9)* audit and reports non-financial processing (Deloitte, 2018).

Content: The SOC 3 report is basically a smaller scale SOC 2 report, it only includes the auditor’s opinion and the management assertions (Deloitte, 2018).

Standards: As for the SOC 2 report, the auditing standards regulating SOC 3 are ISAE 3000 at the international level and AT Section 101 (from SSAE 10, 11, 12 and 14) if the US standard is required (Deloitte, 2018; Moss Adams LLP, 2017).

Types: In contrast to the SOC 1 and the SOC 2 reports, there is only one type of the SOC 3 report (Deloitte, 2018).

Audience: The main interest of SOC 3 is its public distribution where the SOC 2 report has a restricted use. Organizations are generally required to go through a SOC 2 audit before demanding a SOC 3 report (Moss Adams LLP, 2017). As explained by the auditors during our interviews, the demand for such report is excessively low. However, the large distribution possibility offered by the SOC 3 report can be a significant incentive for companies (Moss Adams LLP, 2017).

4.4 SOC Reports: a summary

Presented by Deloitte (2018) in its publication over third-party assurance reporting, the following table summarizes the diverse characteristics of three existing SOC reports. This table can be highly helpful to find its way into the technical features of the SOC reports.

	SOC 1	SOC2	SOC 3
Purpose	Report on controls over at service organisation that may be relevant for to user entities' internal controls over financial reporting.	Report on non-financial processing based on one or more of the Trust Service criteria on security, availability, privacy, confidentiality and processing integrity	Report on non-financial processing based on one or more of the Trust Service criteria on security, availability, privacy, confidentiality and processing integrity.
Scope	Services and processes covered in the report are defined by the management of the service organisation.	Consists of 1 or more of Trust Service criteria on security, availability, confidentiality, processing integrity and privacy. For each domain principles and controls are predefined.	Services and processes covered in the report are defined by the management of the service organisation
Content	Auditor's Opinion Management Assertion System Description Examination Results Additional Information	Auditor's Opinion Management Assertion System Description Examination Results Additional Information	Auditor's Opinion Management Assertion
Standards	ISAE3402	ISAE 3000	ISAE 3000
	SSAE18	AT 101	AT 101
Types	Type I & Type II	Type I & Type II	
Audience	Distribution restricted to the users of the services and their auditors.	Distribution restricted to the users of the services, their auditors and specified parties (e.g. prospects).	Distribution to anyone.

Table 3 - SOC Reports Summary

Source: Deloitte, Managing Risk from Every Direction (2018, pp5).

As presented in the table above, the three kinds of SOC report have their own characteristics. SOC 1 and 2 share the same content but do not have the same purpose. SOC 2 and 3 both report non-financial processing based on Trust Service Principles but do not contain the same final content. The norms ISAE 3402 and SSAE 18 only oversee the processing of SOC 1.

5. When performing a SOC audit?

A service organization control review has to be performed when a service organization request it to an audit company. The US public accounting firm Moss Adams LLP (2017) proposes a 7-step process for service organizations preparing for a SOC report:

1. Determine if the demand for the SOC report is important enough to justify the cost induced;

2. Assign a SOC lead and solicit commitment from control owners;

3.Realize the time, resources and the effort involved in the process;

4. Select a service auditor to conduct the audit;

5. Choose the proper report - SOC 1, SOC 2, or SOC 3 and the correct type;

6. Prepare for the SOC examination; and

7. Collaborate with the auditor during the control (Moss Adams LLP, 2017).

The auditors who were interviewed explained that there is no standard duration for a SOC examination. It depends on the size of the organization and the complexity of its controls. For an organization having its internal controls already in place, the average time can fluctuate from one to three months in the case of a Type I report. This average duration can vary from three to twelve months for a Type II report. Finally, it takes more time for companies that have not implanted their internal control yet.

The organization’s managers interviewed expressed for their part their preference to carry their SOC audits during the least busy period of the year considering the non-urgency of that review.

6. Research Questions

The SOC framework explained throughout this chapter provides a standardized process for third-party assurance. The standards give a guideline to auditors and their clients in the way they perform a SOC audit and report it. Understanding the major advantage of that standardization for services organizations, is the basis of our first research question:

Q1 - What is the main benefit of a standardized SOC reporting?

According to BDO (2018) and PwC (2019), the main advantage of SOC reports is the standardization of the assurance engagement audit. For the service organization, it significantly decreases the number of audit documents requested from their different customers and their auditors. Companies save time and financial resources as only one audit has to be conducted and its report can be addressed to all the stakeholders. With SOC reports, the company provides the same and transparent information to their stakeholders which lowers the risk of misunderstandings and possible request for clarifications (BDO, 2018; PwC, 2019).

The figure above illustrates the two following scenarios: without a standardized SOC report and with the SOC report standardization.

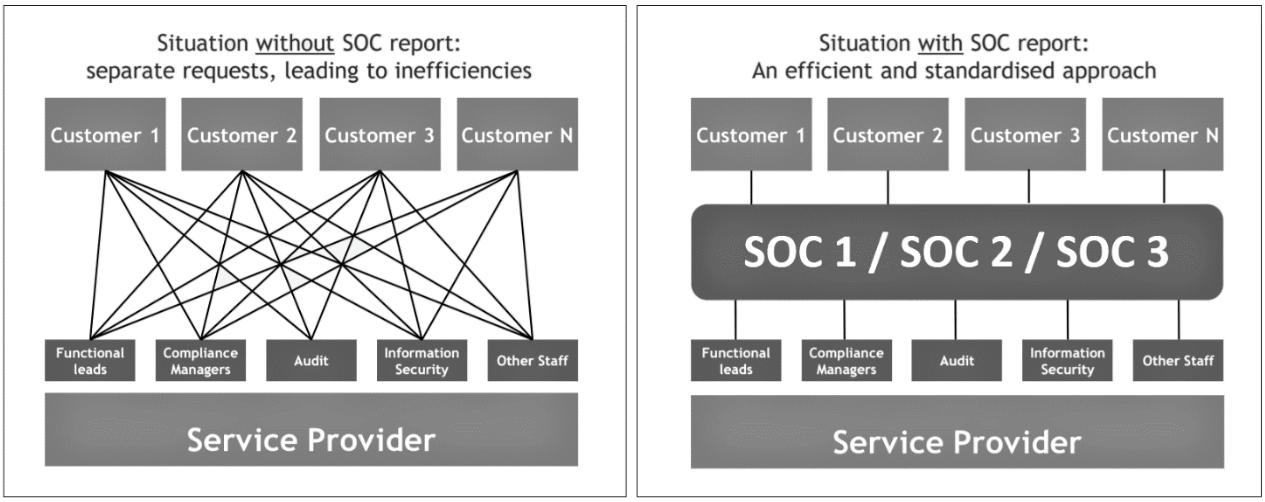

Figure 3 – Without and with SOC reports

Source: BDO, Third Party Assurance Reporting (2018, pp. 2).

The answers collected through the interviews with the auditors and service organization's managers correlate with the explanation given above. A standardized SOC format helps companies to share assurance on the way they operate services to their customers. Large service organizations indeed have multiple clients, all asking for a third-party assurance report.

Another research question concerns the understanding of service organizations towards independent SOC examination and reporting. As a consequence of the outsourcing expansion within the last decades, independent certifications such as SOC reports have indeed grown in popularity in the business world (Deloitte, 2018). But in this jungle of standards and accreditations, do service organizations really master the scope, the requirements and the report itself of a SOC audit?

Q2 - Do service organizations requesting a SOC report fully understand it?

The answer here depends on the type of the respondent.

On the one hand, the service organization managers interviewed admitted not mastering the topic as much as an auditor is expected. But they consider having a sufficient understanding of the topic and admit relying on their auditor's help for more technical points while drafting their report. All interviewed managers also explained that their understanding of SOC report has been growing through the years. Some of them admitted a certain lack of awareness on the topic during their first years of implementing a SOC review in the organization. Finally, most of them have expressed the benefit of that kind of examination to keep improving their internal control processes.

On the other hand, the interviewed auditors (who have an independent point of view and a large experience of third-party assurance with numerous different clients) explained that most companies do not have any knowledge about SOC and ask lots of questions to their auditor. Especially if they are small organizations that have never gone through that kind of audit. The auditors explained that service organizations asking questions are most of the time pushed by their clients. So, the more an organization will collaborate with an auditor, the more it should understand and master the reasons, the scope and importance of a SOC audit. But the auditors interviewed also explained that the real added-value of a SOC report will depend on the organization's own culture and the ambition of the its Board:

1. Some companies do not especially care about understanding that kind of non-financial audit. They see it more like a 'tick-the-box' requirement in order to obtain a green report to provide to their customers. In that case, the SOC report is simply seen as a marketing tool, as an additional certification/attestation to attract customers.

2. Some other companies, the ones that really care about quality, processes and control, really want to understand and handle their SOC audits. They fully collaborate in order to increase the maturity of their internal control. One of our interviewees in particular explains that: "When you go back three or four years later [within the organization], when it is really part of their DNA, of their culture, you can see that they have grown in maturity". He continues: "They are now able to tackle risk. They understand the importance and the requirements of SOC audits. But it all depends on their management's willingness".

CHAPTER 3
STANDARD-SETTING ORGANIZATIONS

1. Definition

As seen in Chapter 2, the SOC reports requirements and issuance are regulated by independent bodies called standard-setting organizations. A Standard-Setting Organization (SSO), also referred as Standard-Developing Organization (SDO) is defined by *U.S. LEGAL - Law & Legal Definition*[25] (2018) as: "an entity that is primarily engaged in activities such as developing, coordinating, promulgating, revising, amending, reissuing, interpreting, or otherwise maintaining hundreds of thousands of standards applicable to a wide base of users outside the standards developing organization"[26]. The terms 'standards organization' and 'standards body' are also commonly used by academics as well as legal and business practitioners.

The standard-setting organization's goal is the acceptance and proliferation of new standards, their promotion and to insure their constant update. Standards bodies can be classified by professional fields of application and their geographical radius can be local, regional, national or even global (Gandal and Regibeau, 2014).

This chapter aims to lay the foundations of the bodies responsible for setting the auditing norms related to SOC reporting as well as their purpose and framework.

2. General context

2.1 The spark that ignited the powders

The 21st century started with several corporate scandals. In the US, the Enron/Andersen[27] and WorldCom[28] cases both broke out in 2002. In Europe, the collapse of Parmalat[29] happened at the end of 2003. Seen as financial audit failures, these scandals resulted in a wide loss of public trust towards control and regulation organizations worldwide. (Hay, Knechel and Willekens,

[25] U.S. Legal is an US-based website providing a free juridical terms dictionary online to consumers, businesses and attorneys.
[26] This definition has been underpinned by Sidak (2013, pp.986) as well, in his paper *The Meaning of Frand, Part I: Royalties* released in *Journal of Competition Law & Economics*, a peer-reviewed law journal published by Oxford Academics.
[27] The Enron/Andersen case is described in *Appendix 10*.
[28] The WorldCom case is described in *Appendix 11*.
[29] The Parmalat case is described in *Appendix 12*.

2014). To tackle this confidence crisis and regain public trust, national and international regulators as well as global organizations such as the World Bank[30], the International Organization of Securities Commissions[31] (IOSCO), the International Association of Insurance Supervisors[32] (IAIS) and the Basel Committee on Banking Supervision[33] (BCBS) came to the conclusion in 2003, that standardized audit processes had to be strengthened and that the code of conduct and the competence of auditors had to be enhanced (PIOB, 2012; Hay et al., 2014). The major result was the decision to undertake a vast reform of the International Federation of Accountants (IFAC, detailed in Section 3), the international body responsible for the accountancy profession and representing on the global scale all its constituent national accounting federations (PIOB, 2019; IFAC, 2019a).

2.2 The IFAC reform

With support of the organizations mentioned above, the IFAC's Council unanimously ratified its intrinsic reform in November 2003. This reform was developed via consultations with international regulation agencies (World Bank, IOSCO, BCBS, etc.) as well as IFAC's member organizations (national federations of accountant and auditors, further details in Section 3) (IFAC, 2019a). The declared goal was to restore stakeholders trust by bringing public interest back at the heart of IFAC's standard-setting process (PIOB, 2012). To achieve these objectives, the creators of the reform believed in: "greater rigor, transparency and accountability into the standard-setting process, while making the IFAC boards accountable to an independent body that ensured they served the public interest" (PIOB, 2019). This reform is based on two pillars:

1. A broad overhaul of the governance system, the committees' composition and boards' management was the condition for the IFAC to continue issuing standards in the matter of audit, ethical conduct and continuous education of professionals (PIOB, 2019); and

2. The creation of a brand-new and independent board in charge of the governance of the International Federation of Accountants. This body was created to oversee IFAC's procedures on a collaborative basis and public interest representation (PIOB, 2019; IFAC, 2019a).

[30] The World Bank is: "an international organization dedicated to providing financing, advice and research to developing nations to aid their economic advancement" (Investopedia, 2018).

[31] The IOSCO is: "an international organization, made up of the securities commissions of different countries, that sets rules for the buying and selling of shares, bonds, etc." (Cambridge Dictionary, 2019).

[32] The IAIS is: "the international standard-setting body responsible for developing and assisting in the implementation of principles, standards and other supporting material for the supervision of the insurance sector" (IAIS, 2019).

[33] The BCBS is: "the primary global standard setter for the prudential regulation of banks and provides a forum for regular cooperation on banking supervisory matters" (Bank for International Settlements, 2019).

2.3 PIOB creation

In the continuum of the IFAC's reform, international regulators and global organizations (World Bank, IOSCO, BCBS, IAIS, etc.) established the Public Interest Oversight Board (PIOB) in February 2005. This new body was designed to guarantee that standards-setting for the auditing, ethics and education was fully transparent and served the public interest (PIOB, 2019; IFAC, 2019a). The lack of transparency arose from the fact that before the creation of the PIOB, the International Federation of Accountants was free to set standards without the supervision of any public interest committee or board (PIOB, 2019; IFAC, 2019a). As Stavros Thomadakis, the first PIOB's Chairman, explained in the columns of *The New York Times* in 2005: "For a long time, the accounting profession and the auditing profession were regulating themselves." and continued: "This is not really a regulatory organization. It is put together to establish public interest oversight of auditing standards." (Norris, 2005, pp.9). The statutory mission of the PIOB is to make sure that the public interest is at the heart of the whole standard adoption procedure and implementation (PIOB, 2019). *Appendix 13* gives a fair overview of the PIOB's supervising architecture over the IFAC.

In his *Times* article, Norris (2005) took the example of auditing standards. He explained that international auditing standards were previously developed by a committee of auditors via the International Auditing and Assurance Standards Board (IAASB), an IFAC subdivision (further explanation in Section 3.1), without any supervision or coordination with public authorities. Since the IFAC's reform, the IAASB has kept elaborating audit standards, but now the PIOB supervises all the standard-setting steps and has the right to block nominations to that board. Michel Prada, the former Chairman of the French Financial Markets Authority[34] was also interviewed in the *Times* over the PIOB. He described it as bringing: "a sense of responsibility among audit practitioners and the international institutions and regulatory organizations involved in promoting financial stability in a globalized economy." According to him, the creation of the PIOB:"[would help] in enhancing the quality of financial reports and restoring public confidence." (Norris, 2005, pp.9).

2.4 The 2007 financial crisis

Only a few years after the IFAC reform and the creation of the PIOB, the economic and financial crisis broke out in 2007. The direct results of the 2007 crisis for audit standard

[34] The French Financial Markets Authority or Autorité des Marchés Financiers (AMF) is an independent public body responsible for regulating financial markets in France (AMF, 2013).

organizations have been stricter regulations regarding to high-risk investments, more financial transparency and a closer governance of financial markets, which are now seen as global and interdependent (Hay, Knechel and Willekens, 2014). In terms of audit procedures revaluation, the IFAC (still under the PIOB's supervision) launched the *Clarity Project* in 2007. This project had aimed at restating the objectives and improving the understanding of the International Standards on Auditing (ISAs), which had to simplify worldwide their translation into national regulations. The Clarity project was all about creating a "convergence among countries to an agreed set of credible international standards [that would] contribute to the development of consistent and comparable audited financial statements and thus support the stability of the international financial system" (PIOB, 2012).

3. IFAC

The International Federation of Accountants (IFAC) is an international non-governmental organization representing the accountancy profession, this committee was founded in Munich in 1977. It includes 175 accountant federations (called members) in over 130 countries and jurisdictions, the IFAC represents approximately 3 million accountants from all sectors of activity in the world (IFAC, 2019a). The IFAC and its different boards are under the PIOB's direct supervision (as previously explained in Section 2.3, and schematized in *Appendix 13*).

According to IFAC's mission, the organization aims to serve the public interest and support the accountancy profession. Here is an overview of its statutory objectives as presented in the *IFAC Strategic Plan 19-20*:

1. Contributing to and promoting "the development, adoption, and implementation of high-quality international standards";

2. Speaking out as the voice for the global profession; and

3. Preparing a future-ready profession (IFAC, 2018, Strategic Plan 19-20, pp.2).

To achieve these goals, the International Federation of Accountants is subdivided into several boards. Each board is under the IFAC's responsibility and oversees the issuance of specific standards for each board (IFAC, 2019a). The organization chart displayed in *Appendix 14* provides a schematical view of the organization. It also helps to better navigate between the myriad of board and standard acronyms presented in the following sections.

3.1 IAASB

The International Auditing and Assurance Standards Board (IAASB) represents the principal IFAC's board. The IAASB is officially described as: "an independent standard-setting body that serves the public interest by setting high-quality international standards for auditing, quality control, review, other assurance, and related services, and by facilitating the convergence of international and national standards" (IAASB, 2019). According to the IASplus[35] website powered by Deloitte (2019), the IAASB issues several types of auditing pronouncements:

1. International Standard on Auditing (ISA): These standards constitute the backbone of audit practices regulation. Requirements such as Materiality (ISA 320), Audit sampling (ISA 530), Going concern (ISA 570) or Opinion and Reporting on Financial Statements (ISA700) to name but a few, are governed by these IAASB standards. There are currently 38 different ISAs in put into effect (IAASB, 2019);

2. International Standards on Assurance Engagements (ISAE): These standards are the ones regulating assurance engagement. This specific type of audit engagement is defined by the IAASB in its publication *International Framework for Assurance Engagements* (IFAE) as: "an engagement in which a practitioner expresses a conclusion designed to enhance the degree of confidence of the intended users other than the responsible party about the outcome of the evaluation or measurement of a subject matter against criteria" (IAASB, IFAE, 2010, pp.6). This kind of engagement involves a three-party relationship: a practitioner, a responsible party and intended users. In the context of SOC reporting, the setting will be the following: a practitioner (the auditor), a responsible party (the service organization) and intended users (the user organization) (IAASB, IFAE, 2010). As seen in the Chapter 2, ISAE 3402 is the specific international standard regulating SOC reporting. This standard is encompassed by the IFAC within the assurance engagement framework. As central point of this work, ISAE 3402 is analyzed in Chapter 4;

3. International Standards on Quality Control (ISQC): These two standards (ISQC1 and ISQC2) have been developed by the IAASB to ensure that companies and their employees are in full compliance with professional requirements and regulations in order to set a proper system of quality control (IAASB, ISQC 1, 2010); and

[35] IASplus is an open access website initiated by Deloitte to provide the public and professionals with a large collection of resources dealing in relation with to international accounting and auditing standards, the development of new guidelines and principles as well as the framework of the issuing entities involved (IASplus, 2019).

4. International Standards on Related Services (ISRS): The goal of these two standards (ISRS 4400 and ISRS 4410) is to give a framework and define the professional responsibilities of auditors and accountants for specific engagements. (IAASB, 2019).

The IAASB also releases other types of documents that have less impact for the auditors, such as the International Auditing Practice Statements (IAPS) and the International Framework for Assurance Engagements (IFAE) and International Standards on Review Engagements (ISRE) (Deloitte, IASplus, 2019).

All these standards are developed following a rigorous process conducted by the IFAC through the IAASB entity. During this fully transparent process, IFAC members as well as the Consultative Advisory Group (CAG) discuss the auditing standards. The CAGs are composed of external guests intended to represent the regulators, authors and users of financial statements (by including them into the standard development). The whole process is monitored by the PIOB as explained earlier (IAASB, 2019). This IFAC procedural architecture is displayed in *Appendix 14*. All new IAASB projects are deliberated during public meetings and all meeting agendas, highlights and papers are published on their website (IAASB, 2019).

3.2 IESBA

The International Ethics Standards Board for Accountants (IESBA) is defined as: "an independent standard-setting board that develops and issues, in the public interest, high-quality ethical standards and other pronouncements for professional accountants worldwide" (IESBA, 2019). Its major contribution is the periodical revision of the *Code of Ethics for Professional Accountants*, setting ethical requirements for professional accountants and auditors. The board also promotes the adoption of better ethical practices on a global scale, and "fosters international debate on ethical issues faced by accountants" (IESBA, 2019). This ethical guidance has been deeply revised and completed in 2009, following the financial crisis and the public wish for an improved code of ethics within the finance world (PIOB, 2012).

3.3 IAESB

The International Accounting Education Standards Board (IAESB) is defined as "an independent standard-setting body that serves the public interest by establishing standards in the area of professional accounting education that prescribe technical competence and professional skills, values, ethics, and attitudes" (IAESB, 2019). According to the IASplus website powered by Deloitte (2019), IAESB issues 3 types of documents:

1. International Education Standards (IES) are the standards expressing the educational benchmarks for IFAC member bodies and committees regarding to the training of professional accountants;

2. International Education Guidelines for Professional Accountant (IEG) are designed to interpret, illustrate and elaborate recent IES in order to help IFAC member organization's implementing these education standards; and

3. International Education Papers for Professional Accountants (IEP) are set in order to analyze and explain educational practices applied and problems existing (Deloitte, IASplus, 2019).

4. AICPA

The American Institute of Certified Public Accountants (AICPA): "represents the CPA profession nationally regarding rule-making and standard-setting, and serves as an advocate before legislative bodies, public interest groups and other professional organizations" (AICPA, 2019a). Founded in 1887, the institute represents over 431,000 members. The AICPA aims to develop standards for audits, educational guidance and ethical matters in accordance with the US law (AICPA, 2019a). The institute is an official affiliate of the IFAC and is furthermore considered as a leading member of the international federation. For that reason, AICPA's publications have to be in line with IFAC's guidance and may not derogate from it (IFAC, 2019a).

To achieve its objectives, the American Institute of Certified Public Accountants is subdivided into several boards or committees. Each of them is overseen by the AICPA and is responsible for releasing specific standards regarding the nature of each board and committee's role (AICPA, 2019a). The organization chart displayed in *Appendix 14* provides a schematical view of the standard-setting organization and its internal entities.

4.1 ASB

Representing the most important AICPA's body, the Auditing Standards Board (ASB) is responsible for issuing auditing principles in the US. The AICPA defines it as: "[the] senior committee for auditing, attestation, and quality control applicable to the performance and issuance of audit and attestation reports for non-issuers" (AICPA, 2019a).

The ASB aims to serve the public interest. To achieve this mission, the board develops and updates comprehensive auditing standards. It also communicates standard interpretations and guidance for good practices so practitioners can reach high-quality in their audit procedures. Under IFAC supervision, the board launched the *Clarity Project* in 2007. Together, they aimed to redraft their *Codification of Statements on Auditing Standards* and rethink their drafting conventions under a goal of clarity in order to converge their standards with the ISAs and ISAEs issued at the international level (AICPA, 2019a). It results in strategic convergence of ASB’s standards with those of the IAASB.

The Auditing Standards Board promulgates different kinds of standards but called statements:

1. <u>Statements on Auditing Standards (SAS)</u>: These statements represent the US requirements applied by external auditors in their auditing procedures for non-public companies in the United States. The SAS are indeed the counterparts of the ISA at the US level (AICPA, 2019a). Since 2002, the auditing of publicly traded companies, on the other side, has had to follow the requirements of the Public Company Accounting Oversight Board (PCOAB). That board was created in 2002 following the Sarbanes-Oxley Act (a US federal law adopted in response to the corporate scandals which rocked the early 2000’s) to better regulate the quality and the obligations of external audits. The PCAOB develops standards called Auditing Standard (AS) (PCAOB, 2019);

2. <u>Statements on Standards for Attestation Engagements (SSAE)</u>: These statements are the American derivatives of the ISAE standards. As their international sisters, the SSAEs cover engagements other than classical auditing services. One of these specific engagements is the reporting of Service Organization Control within the framework of a three-party relationship (AICPA, 2019a). As seen in Chapter 2, the recent standard SSAE 18 now replaces SSAE 16 for the requirements of SOC reporting. SSAE 18 is therefore the specific US standard regulating SOC reporting. This standard is encompassed by the ASB within their attestation engagement framework. (AICPA, 2019a). As central point of this work, SSAE 18 is analyzed in Chapter 4; and

3. <u>Statements on Quality Control Standards (SQCS)</u>: These statements are the US adaptations of the ISQCs published by the IAASB. Organizations applying AICPA standards are required to adhere to these quality control standards established by the ASB. The SQCS 8 is the latest statement published by the ASB in this matter. It replaces and overrules all previous quality standards (AICPA, 2019a).

The AICPA also publishes statement interpretations helping auditors and accounting practitioners of all kinds to understand and handle these standards (AICPA, 2019a).

4.2 PEEC

The Professional Ethics Executive Committee (PEEC) is: “a senior committee of the AICPA charged with interpreting and enforcing the AICPA Code of Professional Conduct and for promulgating new interpretations and rulings, and for monitoring those rules and making revisions as needed” (AICPA, 2019a).

4.3 PcEEC

The Pre-Certification Education Executive Committee is the committee responsible for: “[assisting] the AICPA in achieving its academic initiatives, programs and partnerships to grow and engage a community of diverse, well prepared, highly qualified CPAs” (AICPA, 2019a).

5. Accounting Standards

On the one hand, auditing standards regulate the way auditors have to perform their procedures, on the other hand, accounting standards establish the accounting rules audit professionals should enforce (Norris, 2005). These two types of norms are at the very heart of the auditing profession but they are however developed by different organizations. Despite being the representative bodies of the accountancy professions at their respective levels, the IFAC and the AICPA are not entitled to issue accounting standards for the sake of independence (IFAC, 2019a). These standards are developed by the International Accounting Standards Board (IASB) at the international level and the Financial Accounting Standards Board (FASB) at the US degree (IASplus, 2019). The following paragraphs provide a brief description of these standard-setting organizations.

5.1 IASB

The International Accounting Standards Board (IASB) is: “an independent group of experts with an appropriate mix of recent practical experience in setting accounting standards, in preparing, auditing, or using financial reports, and in accounting education” (IFRS Foundation, 2019). This board (which should not be confused with the previously seen IAASB) is part of the IFRS Foundation. In this framework, they are in charge of developing the well-known International Financial Reporting Standards (IFRS) which regulate international and consolidated accountancy by providing a global accounting language (IASplus, 2019).

5.2 FASB

The Financial Accounting Standards Board (FASB) is an independent and non-profit organization that is responsible for developing and promulgating financial accounting standards for American companies reporting their accountancy under the US Generally Accepted Accounting Principles (GAAP). The Securities and Exchange Commission[36] (SEC) designated the FASB as the authorized accounting standard developer for public companies[37]. These standards are fully recognized by the AICPA as official, as well (FASB, 2019).

As a standard-setting organization, the FASB is part of the Financial Accounting Foundation (FAF). Founded in 1972, the FAF is an independent, non-profit, private-sector organization in charge of the supervision and administration of the FASB (FASB, 2019).

A summary table gathering all the entities presented in this chapter is disclosed in *Appendix 15*. This table summarizes the application area of each board and the parent organization it belongs to.

[36] The Securities and Exchange Commission (SEC) is: "an independent [US] federal government agency responsible for protecting investors, maintaining fair and orderly functioning of the securities markets, and facilitating capital formation" (Investopedia, 2019).
[37] A public company is defined by the Cambridge Dictionary as: "a company whose shares are traded on a stock exchange" (2019). Not to be confused with a state-owned company.

CHAPTER 4

ANALYZIS OF ISAE 3402 AND SSAE 18

1. Third-party assurance standards

1.1 Introduction

As seen in the previous chapter, an assurance engagement is defined by the IAASB in its publication *International Framework for Assurance Engagements* (IFAE) as: "an engagement in which a practitioner expresses a conclusion designed to enhance the degree of confidence of the intended users other than the responsible party about the outcome of the evaluation or measurement of a subject matter against criteria" (IAASB, IFAE, 2010, pp.6). Chapter 3 also establishes that assurance engagement (in the framework of a service organization control) involves a three-party relationship: a practitioner (the auditor), a responsible party (the service organization) and the intended users (the user organization) (IAASB, IFAE, 2010).

This chapter aims to analyze the two major standards regulating SOC auditing and reporting: ISAE 3402 and SSAE 18. However, this research work must take a step back and briefly examine the timeline of assurance standards. Only this historical contextualization will allow to obtain a proper understanding of current normative situation regarding SOC reporting.

1.2 Timeline

The history of third-party assurance standards started indirectly in 1992 with the US audit standard SAS 70, issued by the AICPA as a classic audit standard. At that time, outsourcing was in continuous expansion and evolution. There was, however, no standard for the non-financial control of third-party service companies (Morris, 2016). Since no specific framework existed yet, SAS 70 quickly became internationally recognized by external auditors for reporting on things other than financial reports (Denyer and Nickell, 2007). With the outsourcing evolution, the AICPA decided to adapt this standard on several occasions to match with the evolution of subcontracting (Morris, 2016). In 2002, the adoption of the Sarbanes-Oxley Act even led to the obligation for publicly listed companies to conduct an evaluation of their service organization's control. That law logically strengthened the popularity of the SAS 70 (Denyer and Nickell, 2007). It was only in 2005 that the IFAC, the international body in charge of auditing standards, released the ISAE 3000. The purpose was to provide an official international framework and norm for assurance engagements other than financial audits and to pave the way for SOC reporting as it exists nowadays (Van Beek and Van Gils, 2017). This was achieved in 2009, with the standard ISAE 3402 also developed by the IFAC. It was designed to regulate the assurance reports on controls in a service organization. Each country could then translate it into its own regulation (Van Beek and Van Gils, 2017). One year later (2010), the AICPA released the SSAE 16 as the American translation of the previously mentioned ISAE 3402 and the institute decided to go a little bit further than required (Morris, 2016). According to Van Beek and Van Gils (2017): "Due to all the different standard numbers, the AICPA introduced the term Service Organization Control (SOC) and used SOC 1 as an equivalent of the SSAE 16" (Van Beek and Van Gils, 2017, pp.3). This standard indeed permitted the standardization of the SOC reports, which was an important step forward for third-party assurance globalization. It provided uniformity and clarity to auditors and service organizations (Van Beek and Van Gils, 2017). Finally, in 2016, the AICPA published the SSAE 18, superseding SSAE 16 as an effort of simplification (as explained in Section 3).

The timeline here-after perfectly illustrates and summarizes the chronology and evolution of the standards relating to service organization control.

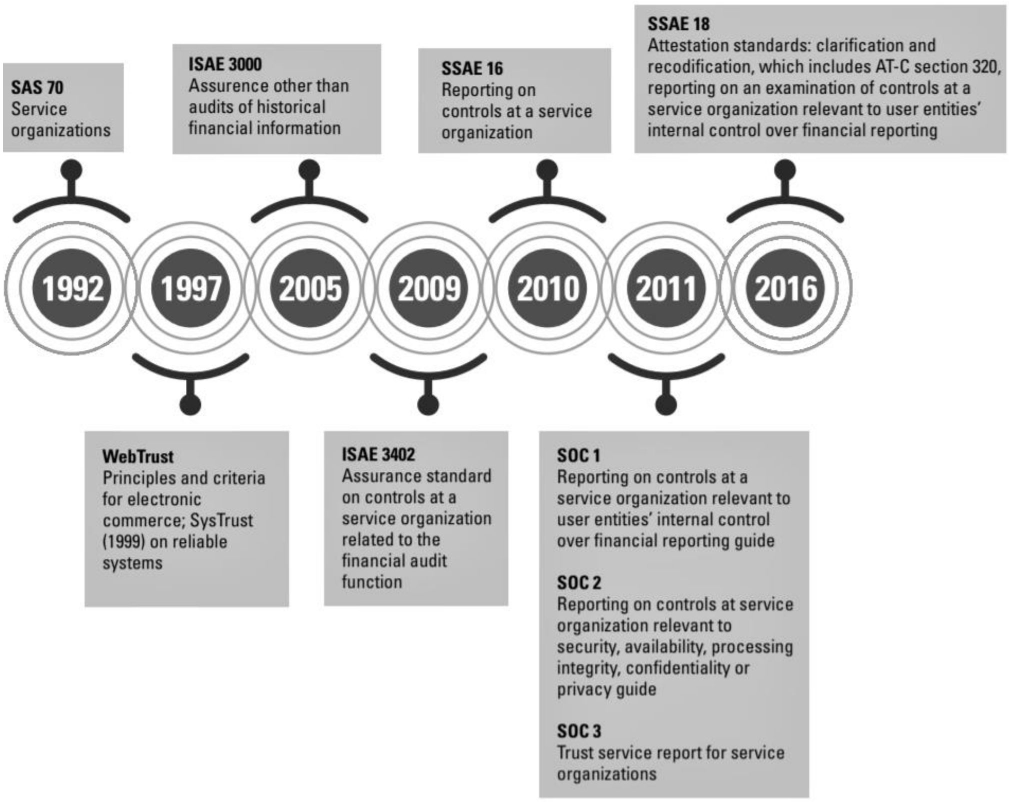

Figure 4 -Timeline of TPA standards

Source: Van Beek and Van Gils, The new US Assurance Standard SSAE 18 (2017, pp.2).

1.3 SAS 70

The Statement on Auditing Standard (SAS) No. 70 - Third-party assurance for Service Organizations, was released by the AICPA's Auditing Standards Board (ASB) in April 1992. As explained earlier, it served as an unintended but recognized international framework for service organization's non-financial audit during for almost 18 year (Morris, 2016). According to the AICPA's website especially dedicated to SAS 70 (2019b), an audit performed in accordance with that standard assures that the service organization has been subject to an: "in-depth examination of their control objectives and control activities, which often include controls over information technology and related processes" (AICPA, 2019b). The result of a SAS 70 audit was the issuance of a service auditor's report. That report includes the final opinion of the service auditor and gives the assurance that control objectives and control processes of the service organization have been examined by an independent auditor or audit organization. They use the standard as a guideline to elaborate their opinion (AICPA, 2019b). The foundations of the current SOC audits were perceptible but SAS 70 was not comprehensive enough and did not describe the controls assessment enough (Morris, 2016).

1.4 ISAE 3000

The International Standard on Assurance Engagements (ISAE) 3000 - Assurance Engagements Other Than Audits or Reviews of Historical Financial Information, was published by the IFAC's International Auditing and Assurance Standards Board (IAASB) in 2005 (IAASB, 2013, ISAE 3000). It was the real first effort of the IFAC to provide an international guidance for non-financial assurance engagement performed on service organizations. ISAE 3000 is commonly described as "the assurance standard regarding compliance, sustainability and outsourcing audits" (IFAC, 2019b).

The ISAE 3000 standard is the normative framework of ISAE 3402. It means that all ISAE 3402 engagements have to be performed according to ISAE 3000 requirements (IFAC, 2019b). The ISAE 3000 website dedicated to the standard and developed by the IFAC (2019b) explains the two proposed channels:

1. Outsourced services that do not have any impact on the user organization's financial information should be audited according to the standard ISAE 3000.

2. Outsourced services that have an impact on the user organization's financial information should be audited according to the standard ISAE 3402.

As seen in Chapter 2, the standard ISAE 3000 is the international standard regulating the SOC 2 and 3 reports. Both reports and examination procedures are based on Trust Service Principles previously detailed. In addition to that, this standard is the connection point between ISAE 3402 and the Code of Ethics for Professional Accountants which will be discussed in Chapter 6.

1.5 SSAE 16

The Statement on Standards Attestation Engagements (SSAE) 16 – AT Section 801: Reporting on Controls at a Service Organization was issued by the AICPA's Auditing Standards Board (ASB) in April 2010 and in force from June 15, 2011 on (ASB, 2010, SSAE 16). This section of SSAE 16 is both the standard superseding SAS 70 and the American translation of ISAE 3402 in the context of the AICPA's efforts to converge its statements to the norms issued by the IAASB (Deloitte, 2014). Unlike SAS 70 which was an auditing standard, SSAE 18 is an attestation standard. The AICPA and the ASB indeed wanted to express the fact that a system examination is radically different than a financial statements audit (Morris, 2016). A major difference with the old SAS 70 is that the report issued under SSAE 16 guidance requires a written assertion of the management on the organization's controls as well as a proper description of a system (Deloitte, 2014). As previously explained, the 'SOC 1 report' has been used for several years as a synonym of 'SSAE 16 report', the term SOC then progressively generalized (Van Beek and Van Gils, 2017).

2. ISAE 3402

The International Standard on Assurance Engagements (ISAE) 3402, called "Assurance Reports on Controls at a Service Organization", was released by the IFAC's International Auditing and Assurance Standards Board (IAASB) in December 2009. This ISAE standard is in application for auditors SOC reports that cover periods ending starting from June 15, 2011 (IAASB, 2009, ISAE 3402).

Internationally recognized for regulating the examination and the reporting of SOC 1 engagements, this norm is in fact the complement of the financial auditing standard ISA 402, from which it actually receives the codification. The first paragraph of ISAE 3402 indeed directly set the scope and the framework of such engagement (IAASB, 2009, ISAE 3402).

ISA 402 is the auditing standard dealing with entities outsourcing certain functions of their business. The norm indeed regulates the way auditors have to obtain sufficient and appropriate audit evidences in the specific case where their client relies on a service organization for an outsourced process (IAASB, 2009, ISA 402). In this context, ISAE 3402 allows auditors to establish a bridge between the two entities. Thus, SOC 1 reports can be used by user auditors as appropriate evidences during their engagements. This relation between financial audits and SOC audits is explained in paragraph A1 of ISAE 3402. It also provides practical examples of evidences user auditors can use as part of their financial audits. This paragraph is disclosed in *Appendix 16*.

In addition to that, Paragraph 5 of ISAE 3402 encompasses the standard within the framework of ISAE 3000 and imposes the compliance with its requirements. As previously explained, besides regulating SOC 2 and 3 audits, ISAE 3000 is the foundation of third-party assurance engagements and provides the general rules for performing all SOC audits.

ISAE 3402 is structured as the following:

1. Introduction: Paragraphs from 1 to 7 give the scope of the standard as well as its relationship with other IFAC's pronouncements and the effective application date of the norm;

2. Objectives: Paragraph 8 defines the objectives of the service auditor for those engagements; They are the general objectives of SOC 1 reports, as explained in Chapter 2.

3. Definitions: Paragraph 9 and all its subdivisions provide the definitions of the specific terms dedicated to the realization of a SOC 1 audit;

4. Requirements: Paragraphs from 10 to 56 form the real core of the standard. They contain all the requirements imposed to perform a SOC 1 audit and reporting its results;

5. Application and Other Explanatory Material: These paragraphs are listed from A1 to A53 and serve as practical guidance helping auditors to perform SOC 1 engagements; and

6. Appendices: It provides examples of management assertions and illustrations of service auditor's reports as well as a modified auditor's opinion.

Regarding the possibility of services provided by a subservice organization, ISAE 3402 permits auditors to apply either the Inclusive Method or the Carve-out Method. Both methods have their characteristics but the main principle is that the first method fully includes the relevant controls and objectives of the subservice organization in the scope of the engagement, while the second one excludes them (IAASB, 2009, ISAE 3402).

As confirmed by the interviews carried out with auditors and by the research work, this standard is unquestionably the most recognized and applied norm for SOC 1 audits worldwide.

3. SSAE 18

The Statement on Standards Attestation Engagements (SSAE) 18, also known as *Attestation Standards: Clarification and Recodification*, was released by the AICPA's Auditing Standards Board (ASB) in April 2016. This standard has only been in application since May 1, 2017 (ASB, 2016, SSAE 18).

SSAE 18 is however not a classic auditing norm. This is in fact an umbrella document gathering many former individual standards. This US standard is indeed part of the 'Clarity Project' launched in 2007 by the AICPA and the ASB to recodify their standards within their strategy of convergence towards the IFAC and the IAASB. This project aimed to clarify the standards by making their reading, understanding, and application easier (Van Beek and Van Gils, 2017). This new standard has so allowed to gather almost all the former SSAE standards within one clear document by removing unnecessary redundancies or possible contradictions and by aligning it towards the ISAE already existing standards (AICPA, 2019c).

The entire SSAE 18 is therefore more than the simple US equivalent of ISAE 3402 or the exact successor SSAE 16. It is considered, with some exceptions[38], as the container for all US norms related to attestation engagements.

SSAE 18 is thus structured into sections called 'AT-C' sections. The 'C' stands for "Clarity" and aims to make the distinctions with the former 'AT' sections which are now replaced. The following table presents all the AT-C sections included within the SSAE 18 standard:

AT-C section number	Title
n/a	Preface to the attestation standards
100	Common concepts
105	Concepts common to all attestation engagements
200	Level of service
205	Examination engagements
210	Review engagements
215	Agreed-upon procedures engagements
300	Subject matter
305	Prospective financial information
310	Reporting on pro forma financial information
315	Compliance attestation
320	Reporting on an examination of controls at a service organization relevant to user entities' internal control over financial reporting
395	Management's discussion and analysis

Table 4 – The different AT-C sections of SSAE 18

Source: Van Beek and Van Gils, The new US assurance standard SSAE 18 (2017, pp. 3).

[38] SSAE 18 redrafts and includes all former SSAE norms, with the exception of SSAE 10 Chapter 7 and SSAE 15 (AICPA, 2019c).

Among all these sections, AT-C 320 is the almost equivalent of the international ISAE 3402. AT-C 320 indeed aims to regulate the reporting of service organization controls when those are relevant for the financial reporting of the companies using them (AICPA, 2019c).
In addition to that, paragraph 2 of ATC-320 requires auditors to comply with sections AT-C 105 and 205 of SSAE 18 for performing a SOC 1 audit and report (ASB, 2018c, SSAE 18 (revised), AT-C 320, par. 2, pp. 1). Those sections can be considered as common and general requirements for any attestation engagement conducted under the ASB guidance.

Only these three sections of the standard therefore serve as the normative basis for the production of a SOC 1 report. However, for the sake of simplicity, this work has always used and will continue to use the general term SSAE 18 to describe the standard governing the drafting of a SOC 1 report. Although talking about SSAE 18 AT-C 320 would be more accurate from a normative point of view.

The AT-C 320 section of SSAE 18 contains the requirements for an independent auditor performing a SOC 1 audit and drafting its report. In the same way as ISAE 3402 complements the financial auditing norm ISA 402, AT-C 320 complements the AU-C section 402 called "Audit Considerations Relating to an Entity Using a Service Organization". This is the reason why SOC 1 reports written in accordance with SSAE 18 can be used by auditors as appropriate evidence when they are conducting a financial statements audit of a user entity using one or more service organizations (ASB, 2018c, SSAE 18 (revised), AT-C 320, par. 1, pp. 1).

AT-C 320 has the same structure as ISAE 3402 (Objectives, Definitions, Requirements, Application and Other Explanatory Material). SSAE 18 also permits auditors to apply the Carve-out Method or the Inclusive Method when addressing services provided by subservice organizations. In addition to that, the majority of the paragraphs and the requirements contained in the US norm mirrors the paragraphs from their international counterpart.

The interviewed auditors explained that SSAE 18 is indeed very similar to ISAE 3402 but imposes a series of extra requirements which do not exist within the international framework. These substantive differences will be studied in Chapter 5. They also highlighted that this standard is mainly requested by American companies and firms located in the United States where this certification is well recognized, but non-American companies may also be interested into obtaining such attestation for entering the American market with a strong selling argument.

4. Research Question

When looking at the current norms regulating SOC examination and reporting, the relevant point is the hegemony of ISAE 3402 and SSAE 18 as legitimate standards. From this arises the third question of this research work:

Q3 - How to explain the current normative situation regarding SOC reporting standards?

The combination of the standard-setting environment (developed in Chapter 3) with the historical contextualization of TPA standards (seen in this chapter) provides an explanation to the research question. In regard to the investigations conducted, the current normative situation of SOC reporting standards can indeed be summarized as resulting from the following elements:

1. The historical prominence of the AICPA's standards with SAS 70. This norm was the first on the market for this specific kind of engagement. Since nothing else existed and auditors needed a guideline, they progressively all used SAS 70. That hegemony lasted for almost 18 years, which placed the AICPA as a benchmark standard-setting body.

2. The legal authority of the IFAC to impose a normative framework resulting in a strategic convergence of auditing standards between the IFAC and the AICPA. With the release of ISAE 3000 in 2005 and ISAE 3402 in 2009, the IFAC both finally provided an international framework for assurance engagement and reaffirmed its normative authority on the AICPA. The American body in effect has to develop its standards in respect with the international ones.

3. The AICPA's pro-activity to issue modern and practical standards. By releasing the brand-new SSAE 18 standard in 2016 and keeping updating it since, the AICPA restored its historical prominence.

Gathering all the elements explained above permitted to create the scheme disclosed in *Appendix 17*. That scheme illustrates the current normative situation of SOC standards and provides a more conceptual view on the subject.

Finally, according to the interviewed auditors and in regard to the constant evolution of the outsourcing market and the auditing regulation, the release of new ISAE standard is not to be excluded. The objective for the IFAC would be to better match the outsourcing market. Even though the respondents bet more on a large update of ISAE 3402 than a brand-new standard. According to the interviewees, ISAE 3402 is in effect internationally well recognized within the business world and changing that standard may result in losing its 'brand image'.

CHAPTER 5

STUDY OF THE CONVERGENCES AND DIVERGENCES

1. Introduction

Despite the alleged strategy of convergence advocated by the AICPA towards the IFAC, some divergences logically still exist between their assurance standards regulating SOC 1 auditing and reporting: ISAE 3402 and SSAE 18. Chapter 5 aims to study these similarities and distinctions in order to answer the remaining research questions of the thesis.

The online document *The new US assurance standard SSAE 18: A practical update of the international ISAE 3402?* written by Van Beek and Van Gils (2017) and released in the Compact[39] magazine, addresses the topic studied in this chapter. It is the reason why this work was used as an adequate starting point of research. Van Beek and Van Gils' work led the investigation to a special document: the AICPA's guide (2017) dedicated to the Section AT-C 320[40] of the SSAE 18 standard. This guide is an excellent resource developed by the AICPA to help auditors performing SOC 1 audits. It contains the most recent updates brought to SSAE 18 as well as practical insights from experts of Service Organizations Control engagements. Appendix F of the above-mentioned book provides a helpful comparison between the requirements included in AT-C Section 320 of SSAE 18 and those included in ISAE 3402.

2. Substantive divergences

This section lists all major substantive differences of requirements between ISAE 3402 and SSAE 18. This list does not contain any difference related to terminology which are irrelevant in the context of this research thesis.

2.1 Fraud by service organization personnel[41]

As part of the procedures to examine the operating performance of the service provider's controls, paragraphs 32 of SSAE 18 (AT-C 320) and 28 of ISAE 3402 both demand the service auditor to review the "Nature and Cause" of any deficiency detected during the testing.

[39] Compact is a former KPMG's internal magazine which is now publicly recognized on the marketplace as an audit magazine. KPMG IT Advisory is the official publisher (Compact, 2019).
[40] As seen in Chapter 4, section AT-C 320 is the section of SSAE 18 regulating SOC 1 reporting in particular with AT-C 105 and 205 as general support sections.
[41] All paragraphs of standards mentioned in this section are further displayed in *Appendix 18*.

The brand-new US standard, however, requires an additional procedure via its paragraph 33. This passage indeed states that any auditor, having detected a fraud committed by a staff member of the service organization, has to reassess the risk on accuracy of the system description, the proper design of the controls and the operating effectiveness of these controls in case of a Type II report (ASB, 2018c, SSAE 18 (revised), AT-C 320). The reason is that the AICPA's Auditing Standards Board estimates that a fraud logically impacts the audit's procedures (AICPA, 2017).

Although no explicit action for the discovery of a fraud is mentioned in the international standard, the detection of any fraud would normally impact the procedures applied by service auditors, regardless of the standard applied. So, paragraph 33 of SSAE 18 (AT-C 320) seems to be more about formalizing a procedure than creating a totally extra requirement for the auditor (Van Beek and Van Gils, 2017).

2.2 Anomalies[42]

Again, in the context of control effectiveness and detection of deficiency, the international standard imposes an additional requirement this time. Indeed paragraph 29 of ISAE 3402 indeed states the case where the deviation detected is considered by the auditor as an anomaly in the sampling. This paragraph provides the possibility for the service auditor to conclude that the identified deviation is not representative of the population tested. ISAE 3402, requires however, auditors to obtain a "high degree of certainty" through additional procedures (IAASB, 2009, ISAE 3402, par. 29).

The American standard does not have any equivalent requirement due to the presence of terms such as "in extremely rare circumstances" and "a high degree of certainty" in the original standard. These terms are considered too vague by the American institution (AICPA, 2017).

2.3 Direct assistance[43]

As seen in Chapter 4, SOC 1 engagement performed under the standard SSAE 18 has to be performed according to the AT-C 320 section but also in compliance with the basics of sections AT-C 105 and 205. Paragraphs 39, 41, 42 and 44 of Section AT-C 205 allow service auditors to collaborate with the service organization's internal audit staff and request its direct assistance (ASB, 2018b, SSAE 18 (revised), AT-C 205).

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[42] All paragraphs of standards mentioned in this section are further displayed in *Appendix 19*.
[43] All paragraphs of standards mentioned in this section are further displayed in *Appendix 20*.

It should however be noted that even if ISAE 3402 does not deal with this topic, it does not exclude it either (Van Beek and Van Gils, 2017). The auditors interviewed explained that a direct collaboration between the external and internal audit teams is indeed necessary.

2.4 Documentation completion[44]

The international standard requires service auditors to "assemble the documentation in an engagement file" and to "complete the administrative process of assembling the final engagement file on a timely basis" starting at the auditor's report release date (IAASB, 2009, ISAE 3402, par. 50, pp. 18). Paragraph 50 of ISAE 3402 provides therefore a time requirement but does not set any specific timing.

The American norm, however specifies that auditors have a maximum of sixty days to complete this administrative procedure through Paragraph 35 of SSAE 18, AT-C 105 (ASB, 2018a, SSAE 18 (revised), AT-C 105).

It should finally be noted that ISAE 3402 refers to the quality standard ISQC 1 for further guidance regarding that matter. Paragraph A54 of ISQC 1 indicates that national regulation may set a time limit and that if no limited timing is prescribed, the company should set one reflecting the real need of the company (IAASB, 2010, ISQC 1).

2.5 Subsequent events and subsequently discovered facts[45]

Regarding the subsequent events and subsequently discovered facts, both SSAE 18 and ISAE 3402 require services auditors to inquire when the service organization is informed of any subsequent events that could have a significant impact on the auditor's final report (ASB, 2018b, SSAE 18 (revised), AT-C 205, par.48 ; IAASB, 2009, ISAE 3402, par. 43).

However, paragraph 48 of SSAE 18 (AT-C 205) also imposes service auditors to perform additional procedures if any subsequent event is discovered. Such actions are disclosed in paragraphs A.54 to A.56 (ASB, 2018b, SSAE 18 (revised), AT-C 205, par.48).

2.6 Internal audit report[46]

Paragraph 23 of SSAE 18 (AT-C 320) formally requires service auditors to read the different reports provided by the internal audit function in regards of the controls performed to the services actually audited. The results of these reports have to be considered as part of the risk

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[44] All paragraphs of standards mentioned in this section are further displayed in *Appendix 21*.
[45] All paragraphs of standards mentioned in this section are further displayed in *Appendix 22*.
[46] All paragraphs of standards mentioned in this section are further displayed in *Appendix 23*.

assessment and used for identifying the characteristics of the tests to perform. If no such reports are available, auditors have to obtain an understanding of the nature of the internal control procedures and their results (ASB, 2018c, SSAE 18 (revised), AT-C 320, par. 23).

Van Beek and Van Gils (2017), however explain that even if not formally stated in the ISAE 3402, this practice should logically be applied by auditors, regardless of the standard applied.

2.7 Required written representations[47]

Paragraphs 50 (AT-C 205) and 36 (AT-C 320) of SSAE 18 both require the service organization' management to provide their auditor with specific elements in the written representation that are not required by paragraph 38 of ISAE 3402 (AICPA, 2017). These extra elements are disclosed in Appendix 24.

Finally, paragraph 51 (AT-C 205) of SSAE 18 foresees the case where the management may refuse to provide the requested written representations (ASB, 2018b, SSAE 18 (revised), AT-C 205, par. 51).

3. Differences of content in the report

In addition to the substantive divergences detailed above, the two standards also require some additional elements to appear in the final SOC report. Here are the two possible cases:

3.1 Elements required by ISAE 3402, but not by SSAE 18

Paragraphs 5 and 6 of ISAE 3402 require service auditors to comply with the standard ISAE 3000 which is the normative framework of all TPA engagements. To be in accordance with this standard, auditors have to explicitly state in the assurance report that they applied all requirements of the *Code of Ethics for Professional Accountants* developed by the IFAC. Chapter 6 will further develop this divergence point as part of a study on the ethical dimensions of this thesis subject. The American standard, for its part, does not contain any requirement of this kind (Van Beek and Van Gils, 2017).

3.2 Elements required by SSAE 18, but not by ISAE 3402

Paragraphs 40 and 41 of SSAS 18 (AT-C 320) require some additional elements to be included in the service auditor's report that are not required by ISAE 3402. The most significant elements are listed in *Appendix 25*. Paragraph 40 targets Type II reports and paragraph 41, Type I reports.

[47] All paragraphs of standards mentioned in this section are further displayed in *Appendix 24*.

4. Research Questions

The fourth and the fifth research questions mirror each other. They concern the main convergences as well as divergences between the two standards analyzed.

Q4 - What are the main similarities between the two audit standards, ISAE 3402 and SSAE 18?

As seen in the previous chapters, the norms developed by the AICPA have to be in accordance and to respect, at the least, the norms issued by its parent body, the IFAC. This acknowledged strategical convergence of standards is well and truly visible in the way SSAE 18 is written (in comparison with ISAE 3402). The result of the analysis performed in this chapter indeed indicates that both standards share the same structure and the same substantive basis. With the exception of the element concerning anomalies (previously detailed), all requirements included in ISAE 3402 are logically translated into SSAE 18. The two standards are so similar that, in the light of the results, looking for their 'main' similarities was not a good research approach.

This approach is far more appropriate for listing the main distinctions between the standards.

Q5 - What are the main distinctions between the two audit standards, ISAE 3402 and SSAE 18?

Although strongly convergent, SSAE 18 indeed imposes more requirements than ISAE 3402. This chapter listed and detailed the main substantive divergences. This list rationally excludes all the terminology divergences since those have no real impact on the examination or the reporting. The more significative distinctions are the following:

1. The unique element included in ISAE 3402 and not SSAE 18 is the possibility for the service auditor to conclude that an anomaly detected during the testing of his/her sample is not representative of the whole population.

2. SSAE 18 imposes an explicit time limit of 60 days (starting at the release of the auditor report) for the completion of the administrative process;

3. The obligation under SSAE 18 for auditors to perform some extra procedures (other than simply inquiring) in case of subsequent events and subsequently discovered facts;

4. SSAE 18 requires the service auditor in charge to request some particular elements of written representations from the service organization's management; and

5. SSAE 18 and ISAE 3402 finally do not require exactly the same elements to appear in the SOC report. The international standard for example imposes the inclusion of a statement concerning the respect of the *Code of Ethics for Professional* by the service auditor.

In addition, the research conducted permits to affirm that the remaining distinctions listed, without questioning their existence, can be seen as less significant since these extra requirements should be common practice, regardless of the standard applied. It is rather a matter of reaffirming good practices on paper for the AICPA. The final conclusion of Research Question 5 is so that the divergence between ISAE 3402 and SSAE 18 is limited to only few minor elements. The interviewed auditors furthermore agreed on the marginality of these elements in the light of all the requirements of a SOC 1 audit.

According to the interviews conducted with the sample of auditors, these additional requirements, albeit limited, ineluctably lead to more working time for them and some extra costs for the service organization. These cost issues will have an impact on the final findings of the sixth research question.

The convergences and divergences between the two standards now established, this research work can now address the practical implication for auditors. Some service organizations may be interested into being certified within the international and the American standards. The final research question of this thesis will thus deal with the technical possibility for auditors to perform a joint report in accordance with the two norms.

Q6 - What is the feasibility of drafting a joint SOC 1 report containing both ISAE 3402 and SSAE 18 requirements?

This technique is also known as ‘dual reporting’ and consists in providing an assurance report based on two different standards (Van Beek and Van Gils, 2017). But as explained throughout this chapter and summarized in the findings of *Q4* and *Q5*, SSAE 18 although being similar, is more than a simple US equivalent of ISAE 3402. The final findings of *Q5*, however, concluded that these significative divergent elements were limited to only four, the others being a simple reaffirmation of common audit practices. Drafting a joint SOC 1 report should then be technically feasible.

The interviews carried out with our sample od auditors enable to affirm that:

1. The theoretical feasibility of drafting a joint SOC 1 report is confirmed;

2. This theoretical possibility has even been translated into a practical reality; and

3. Audit companies are used to drafting joint SOC 1 reports for service organizations making this special request.

In their article, Van Beek and Van Gils (2017) also affirm that auditors can draft dual reports. They although add that auditors can index the differences in appendix if there is any risk of misunderstanding.

The auditors interviewed, however, explained that only a relatively limited number of clients request a joint report. According to the discussions carried out with the auditors, the overwhelming majority of their clients (European companies) opt for the international standard for three reasons (potentially cumulative):

1. The service organization has no experience with SOC reporting and is simply looking for a TPA certification. Having no idea that different standards coexist, the company is then automatically oriented to ISAE 3402 by the auditor;

2. The service organization has some experience with SOC reporting but considers than ISAE 3402 is the most adequate assurance standard for the service organization and its customers; and

3. The service organization has some experience with SOC reporting but considers SSAE 18 as too expensive compared to ISAE 3402 due to the extra requirements expected.

In conclusion, the vast majority of Europeans service providers requesting a SOC report use ISAE 3402. But some service organizations may estimate that the SSAE 18 assurance standard is necessary to be fully recognized on the American market. It is simply a question of certification’s brand image from one market to another.

CHAPTER 6
ETHICAL DIMENSIONS

1. Introduction

Sustainability and ethics are increasingly important societal concerns. While their business environment is in the midst of change, Western companies are indeed currently evolving and considering more and more these aspects as significant matters (Hittmar, Jankal, Lorinczy, Sroka and Szanto, 2015). As seen throughout this work, the subject of this master thesis is highly related to standards and normative requirements. So, no link with sustainable development can be established in such circumstances. However, one of the research questions stated in the thesis permits to address an ethical aspect of the subject.

Q5 - What are the main distinctions between the two audit standards, ISAE 3402 and SSAE 18?

This question will in fact serve as an introduction point for describing the ethical principles of the auditing profession and for a specific reflection about independency in SOC auditing.

2. ISAE 3402 requirement

As explained in Chapter 3, the IFAC and the AICPA both have an internal board in charge of ethical matters. Each board is so responsible for issuing and updating its own Code of Ethics. All SOC audits performed under ISAE 3402 or SSAE 18, thus have to comply with the dedicated ethical code (IAASB, 2009, ISAE 3402; ASB, 2016, SSAE 18).

Chapter 5 and the Research Question 5, however, highlighted that ISAE 3402 requires a specific element to be included into the service auditor's report. This report has to explicitly state that the engagement performed complies with the IFAC's *Code of Ethics for Professional Accountants*. Paragraph 53, indeed describes the mandatory content of the service auditor's assurance report. And the sub-paragraph 53 (h) explicitly provides a guideline over this 'ethical statement':

> The service auditor's assurance report shall include the following basic elements: [...]
>
> (h) A statement that the engagement was performed in accordance with ISAE 3402, "Assurance Reports on Controls at a Service Organization," which requires that the service auditor comply with ethical requirements and plan and perform

> procedures to obtain reasonable assurance about whether, in all material respects, the service organization's description of its system is fairly presented and the controls are suitably designed and, in the case of a type 2 report, are operating effectively. (IAASB, 2009, ISAE 3402, par. 53 (h), pp.20)

3. The Five Fundamental Principles of Ethics

The latest version of the *Code of Ethics for Professional Accountants* was published by the IFAC's International Ethics Standards Board for Accountants (IESBA) in April 2018 and will officially be in application as of June 15, 2019 (IESBA, 2018, Code). This Code is yearly revised by the IESBA and under the supervision of the PIOB. But some larger updates have been applied after the IFAC reform and the 2008 financial crisis (among other things) in order to tackle the ethical issues that arose and to restore public trust and confidence towards the accounting and auditing professions (IFAC, 2010).

The IFAC's Code of Ethics originally defines the five fundamental principles of ethics. They constitute the very foundations of good conduct for professional accountants and auditors:

1. Integrity: an accountant should: "be straightforward and honest in professional and business relationships" (IESBA, 2018, Code, par. 110.1 A1, pp.16);

2. Objectivity: a professional accountant should "not to compromise their professional or business judgment because of bias, conflict of interest or the undue influence of others" (IESBA, 2018, Code, par. 110.1 A1, pp.16);

3. Professional Competence and Due Care: a professional accountant should at the same time "attain and maintain professional knowledge and skill at the level required to ensure that clients or employers receive competent professional service based on current technical and professional standard and relevant legislation" and "act diligently and in accordance with applicable technical and professional standards" (IESBA, 2018, Code, par. 110.1 A1, pp.16);

4. Confidentiality: a professional accountant should: "respect confidentiality of information acquired as a result of professional and business relationships" (IESBA, 2018, Code, par. 110.1 A1, pp.16); and

5. Professional Behavior: a professional accountant should "comply with relevant laws and regulations and avoid any conduct that the account knows or should know might discredit the profession" (IESBA, 2018, Code, par. 110.1 A1, pp.16).

4. The International Independence Standards

Published in April 2018 and effective in June 2019, the new Code of Ethics is in fact a fully revised and restructured document. Besides the fundamental principles cited above and the original ethical requirements, the 2018 version of the Code thus includes the *International Independence Standards* for the first time (IESBA, 2019). This restructured International Code of Ethics for Professional Accountants is organized as the following: (IESBA, 2018, Code).

1. Complying with the Code, Fundamental Principles and Conceptual Framework;

2. Professional Accountants in Business;

3. Professional Accountants in Public Practices; and

4. International Independence Standards:

    - Part 4A: for audit and review engagements; and
    - Part 4B: for assurance engagements other than audit and review engagements.

Focusing on third-party assurance engagements, Part 4B of the Code explains that auditor's independence is associated with the objectivity and integrity principles. Paragraph 900.4 describes the two components, simultaneously required to obtain full independency: independence of mind and independence of appearance. Both principles are further developed in *Appendix 26*.

Independence is primordial for auditors, regardless of the mission conducted. This is why Paragraph R900.18 (disclosed in *Appendix 26*) of the Code states that audit companies performing assurance engagements based on assertions have to be independent from their assurance clients. Translated into SOC terms, it means that service auditors have to be independent from the service organizations reviewed.

Through a sequence of requirements, the Code also sets a conceptual framework to recognize the threats that may affect the auditor compliance with the independency principle. Paragraph 120.6 A3 (also disclosed in *Appendix 26*) finally lists these potential threats:

1. Self-interest: the auditor has personal interest (financial or not) regarding the firm audited;

2. Self-review: the auditor reviews his/her own work or an audit performed by his/her company;

3. Advocacy: the auditor promotes his/her client at the price of his/her own objectivity;

4. Familiarity: the auditor is too familiar or has an established relationship with the client; and

5. Intimidation: the auditor may be pressured by external influences (real or perceived).

5. Ethical reflection

These ethical principles lead this work to an open reflection over the independency required from auditors performing SOC reports. This ethical matter was indeed discussed during the interviews with auditors. It permitted the author to elaborate the following ethical reflection:

While independence between auditors and service organizations is established, there is no requirement (in ISAE 3402 or SSAE 18) forbidding service auditors and user auditors to be the same entity. This situation can be explained by two main reasons:

1. This would cause major commercial issues for service organizations. Considering the situation in which an audit firm A provides a SOC report to the service organisation B. If any rule forbidding the same audit firm to draft and later use a SOC report existed, the result would be that the SOC report could not be used by clients also having the firm A auditing their financial statements. The SOC report would therefore would become worthless for service organizations and service users sharing the same auditor; and

2. A second explanation addresses the problem at its root and refers to the theoretical framework of independency. A same audit company both drafting and using a SOC report would in fact not break the self-review threat principle. User auditors indeed do not review the SOC report. They simply rely on it to obtain sufficient and appropriate audit evidences regarding the control environment of the service outsourced. Requiring independence between them is thus simply not necessary.

Another interview, however, permitted to imagine the situation in which an audit firm having implemented an internal control system for a service organization is also responsible for carrying out the SOC examination of this control system. The underlying ethical issue in this case would be the high threat of self-review. An auditor reviewing his/her own production or the work of a colleague would indeed break his/her independency towards the subject audited and would consequently not be able to deliver an unbiased opinion on it.

The impacts for the parties involved within the SOC reporting environment would be the following:

- The service auditor would, intentionally or not, take the risk of providing a biased opinion on the controls audited. If the regulator can demonstrate the non-application of the independency principle through self-review, the auditor would risk penalty fees for this unethical conduct;

- The service organization would face an increasing risk of having a wrongly designed or defective internal control system. The auditor’s opinion included in the SOC report would be biased. The long-term risk for the service provider would be to let a possibly failing control system running for too long;

- The user auditor would use a biased SOC report for obtaining evidences during its financial statements audit. The risk would be to rely on a totally inaccurate report which can lead to false audit evidences, and in turn, bias the financial auditor’s opinion.

- The user organization would be misled by the service organization using a biased SOC certification. It would also increase the risk to rely on inappropriately controlled outsourced services for their day-to-day activity.

Setting high standards of independency for this case seems to be significantly relevant. The problem is that no specific requirement of ISAE 3402 or SSAE 18 explicitly forbid this practice. Both standards simply require to comply with the ethical code and the independency principle. According to the interviewed professionals, audit firms have to set their own independency internal rules in order to make sure the situation describe above does not occur.

From a normative point of view only, the idea would be to develop a new paragraph in Part4B in the Code of Ethics or in a new section of ISAE3402 and SSAE. These lines would state that no auditor or auditing firm can both implement and audit the same control system. Although purely symbolic, this kind of requirement would strongly reaffirm the risk of self-review within the framework of SOC reporting. And audit companies would be able to rely on dedicated normative basis to set their internal independency code of conduct.

GENERAL CONCLUSION

Since May 2017 the US standard SSAE 18 has been applicable for the realization of a SOC 1 report. To put it in simple terms, service organizations now have the choice between the use of this norm or the international norm ISAE 3402 for the certification of their internal processes of control by an external auditor or audit company. The importance of such independent reports has constantly increased due to the development of the economy and the growing reliance on externalization for certain processes. As established, service providers are using the normative SOC framework and its standardized reports to provide trust and confidence to user companies. This situation thus arises from the fact that outsourcing enables companies to externalize some processes and the controls over them, but cannot transfer the risk ownership associated.

This research work has depicted all aspects of Service Organization Control Reporting and has analyzed the two standards currently regulating the most requested type of SOC report.

This work has allowed to highlight the increasing overall importance of third-party assurance for service organizations. Their need to bring confidence over their internal control towards their customers has bolstered the demand for SOC audits and reports. This trend will without hesitation increase the need for auditors on such engagements, far too much in the shadow compared to classic financial audits. From a normative point of view, this work can thus conclude that the two standards are really close, although some limited divergences still exist.

Chapter summaries

The first chapter is devoted to lay the most accurate definition of a service organization and has concluded that such entities are the products of the outsourcing phenomenon. Chapter 1 has served as an entry point to portray the theorical concepts, factors, risks and opportunities behind the outsourcing trend and influencing the demand of third-party assurance reports. This chapter has also been the opportunity to present practical examples of service organizations so that the reader can better visualize the actual objects of the thesis.

The second chapter has presented Service Organization Control Reporting in all its aspects. Chapter 2 has furthermore established that expectations from clients and pressure from competitors are the main reasons why service provider may request a SOC report. It has also determined that the SOC 1 / Type II report is the most requested one.

The third chapter has then deconstructed and studied the standard-setting organizations (the IFAC and the AICPA) responsible for developing the auditing norms regulating SOC reporting.

This chapter has also permitted to produce several organization charts in order to have a better view on these structures and to juggle with all the similar connected acronyms.

The fourth chapter has first retraced the chronicles of assurance engagement standards and emphasized the hegemony of the IFAC and the AICPA over this topic. Chapter 4 has also analyzed ISAE 3402 and SSAE 18 and has highlighted their high similarity.

The fifth chapter has in-depth studied the substantive divergences between the two standards. This normative analysis has permitted to conclude that the US standard presents more requirements than its international counterpart but that these divergences are extremely limited. It has also highlighted that a certain number of theses distinction points are more about formalizing an already existing good practice than creating a brand-new requirement.

The last chapter has finally addressed the general ethical principles and proposed an open ethical reflection over independency for service audit companies. Chapter 5 has concluded that a same audit company both implementing and auditing an internal control system would be self-reviewing and so break the independency principle. Reaffirming the risk of such situation by a dedicated new paragraph in the Code of Ethics would be a strong statement.

Research Questions

This work has been carried out in parallel with several research questions serving as a guiding line. Here is a summary of the results obtained through the combination of the managerial literature and the interviews carried out with the sample of selected professionals.

Q1 - What is the main benefit of a standardized SOC reporting?
Standardization of TPA certifications significantly decreases the number of audit documents requested from customers and their auditors. With SOC reports, organizations provide the same and transparent information to their stakeholders. As a result, it helps them saving time and financial resources as well as it lowers the risk of misunderstandings and possible requests for clarifications.

Q2 - Do service organizations requesting a SOC report fully understand it?
The interviews conducted have allowed to conclude that the understanding of managers from service providers regarding SOC reports, depends on the type of respondents. Auditors seemed to be more nuanced than managers on that topic. The interviews also revealed that the finale utility of a SOC report depends on the culture of the organization and the ambition of its Board. Some firms indeed do not really want to understand the ins and outs of such reports and simply they request them to receive a marketing certification. Other companies, for their part,

understand the usefulness of a SOC report and use it to improve their internal control processes. They consider SOC audits as part of the maturation cycle of their control system.

Q3 - How to explain the current normative situation regarding SOC reporting standards?
This research has permitted to isolate three rational elements currently explaining the hegemony of ISAE 3402 and SSAE 18 in relation to SOC 1 reporting:

1. The historical prominence of the AICPA's standards with SAS 70;
2. The legal authority of the IFAC to impose a normative framework resulting in a strategic convergence of auditing standards between the IFAC and the AICPA; and
3. The AICPA's pro-activity to issue modern and practical standards.

The conducted research has also enabled to create the figure displayed in *Appendix 17*. This figure is a good way to visualize the current normative situation regarding SOC 1 reporting standards.

Q4 - What are the main similarities between the two audit standards, ISAE 3402 and SSAE 18?
As established by *Q3*, the AICPA strives to make its standards converge towards the international ones. The logical result is that both norms share the same structure and approximately the same substantive requirements. In the light of that finding, it has been concluded that looking for their 'main' similarities was not a good research approach.

Q5 - What are the main distinctions between the two audit standards, ISAE 3402 and SSAE 18?
Despite the outcome of the previous research question, an in-depth study of the two standards allowed to highlight several substantive differences between SSAE 18 and ISAE 3402. The US standard imposes more requirements than the international one, such as an explicit time limit for document completion or extra procedures in case of uncovered subsequent events. But the final conclusion of this research question is that the divergence between ISAE 3402 and SSAE 18 is limited to only few minor elements. The interviewed auditors furthermore agreed on the marginality of these elements in the light of all the requirements of a SOC 1 audit.

Q6 - What is the feasibility of drafting a joint SOC 1 report containing both ISAE 3402 and SSAE 18 requirements?
In the light of the results of *Q4* and *Q5*, this work has concluded that drafting a joint report is technically feasible. This technique, also known as 'dual reporting' is indeed applied by audit companies at the request of certain customers. The interviewed auditors, although confirming this finding, explained that joint reports were requested by a relatively limited number of clients. The interviewees also provided different potential explanations for that situation.

Limitations

As explained in the methodology section, this research work is based on a qualitative method conducted through interviews with business professionals. The limited sample of respondents, can however, be considered as a limitation for the thesis. Although, the correlation of answers between all respondents was high, the reduced number of interviewees has indeed potentially restricted the representativity of the information collected.

In link with the first one, a second limitation would be the lack of diversity towards the activity sectors of the service organization managers interviewed. The importance of SOC reports depending on the pressure imposed by the market and its competitors, different activity sectors and markets might indeed have led to more diverse collected answers.

A third limitation of this thesis can be the geographical centrism of the research which, for practical reasons, has focused its interviews on Belgium and Luxembourg. Interviewing American or even non-Western auditors and service organization managers could have brought interesting answers and different perspectives.

Recommendations

While the outcome of the research work and the interviews carried out has allowed to highlight the above-mentioned points concerning SOC Reporting, some general recommendations can also be raised.

The general recommendations for audit companies would be to keep their experts informed of the evolution of standards such as ISAE 3402 and SSAE 18. The increasing demand for SOC audits will indeed force audit firms to train more professionals towards the field of assurance engagements other than financial audit. In addition to that, following the development of both standards in the near future as well as mastering their divergences, would allow auditors to provide proper joint SOC reports to specific clients.

Finally, the general recommendation for service organization managers would be to perceive SOC audits more as a tool, allowing them to improve their internal control system, than a marketing certificate. Anchoring this perception into their corporate culture would indeed help managers to mature their internal control and so better mitigate the risk.

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APPENDICES

Appendix 1 - Questionnaire 1: Auditors

Interview: Service Organization Control Reporting	
Name	
Company	
Function	

The following questionnaire is carried out within the framework of a research thesis on Service Organization Control Reporting. This work is conducted by Marvin Boemer for the purpose of obtaining a Master Degree in Management Sciences from HEC Liège – Business School of the University of Liège.

Preliminary Question

0) Do you formally agree to be recorded during this interview?

Personal Questions

1) Can you please describe your position within the organization?

2) How long have you been working on SOC auditing and reports?

3) Have you worked on a significant number of SOC audits this year?

General SOC Questions

3) According to you, what is the main interest/benefit for service organizations asking for a SOC report?

4) As an independent auditor, do you have the feeling that service organizations fully understand what they are asking for when they request a SOC audit? Or do they simply need a SOC report to "tick-the-box" towards their customers and the market?

5) In your company, which kind of SOC audit are you asked to provide the most?

> SOC 1, SOC 2 or SOC 3

> Type I or Type II

Specific ISAE 3402 and SSAE 18 Questions

6) I suppose that the norms ISAE 3402 and SSAE 18 are really important in your day-to-day work. Can you explain how crucial they are?

7) According to you, what is the biggest difference between the two standards?

8) According to you, on which aspect are they the most similar?

9) Which of these standards is the most used in your job practice?

10) According to you, what are the reasons of this unbalance?

11) Do you sometimes write a joint report following the requirements both standards or do you only write SOC reports for one specific standards?

12) Do you see ISAE 3402 and SSAE 18 as competitor standards or more as complementary standards?

13) Have you felt an important impact when the IFAC released the ISAE 3402 in 2011? Was the change brought by this standard and the SAS 70 significant?

14) Have you seen an evolution in your working practice since the release of SSAE 18 in 2017?

15) What is your personal opinion about the possible development and release of a new ISAE standard?

Do you want to keep this interview anonymous?	YES / NO

Any specific comment?	

Location:	Date:

Appendix 2 - Questionnaire 2: Service Organization Managers

Interview: Service Organization Control Reporting	
Name	
Company	
Function	

The following questionnaire is carried out within the framework of a research thesis on Service Organization Control Reporting. This work is conducted by Marvin Boemer for the purpose of obtaining a Master Degree in Management Sciences from HEC Liège – Business School of the University of Liège.

Preliminary Question

0) Do you formally agree to be recorded during this interview?

Personal Questions

1) Can you please describe your position within the organization?

2) How long have you been in charge of internal control?

3) Can you describe your experience with Service Organization Control / Third-Party Assurance audits?

4) While collaborating with your auditor, to which degree do you discuss about that kind of topic with him/her?

Company Questions

5) Can you please describe the business sector of the company you work for?

6) Can you describe in which framework you company requires a SOC report?

7) Which specific kind of SOC audit/report are you working with?

> SOC 1, SOC 2 or SOC 3

> Type I or Type II

8) Do you know the difference between all these kinds of report?

9) How important is this report/certification for the internal audit function and the Board of your company?

General SOC Questions

10) According to you, what is the main interest/benefit for service organizations asking for a SOC report?

11) What has the standardization of this kind of audits and reports changed for your company?

12) As a manager, do you have the feeling that companies fully understand what a SOC audit and a SOC report are? Or do think that they simply need a SOC report to "tick-the-box" towards their customers and the market?

13) What is the real impact/added value of these kinds of certification on your business sector?

Do you want to keep this interview anonymous?	**YES / NO**

Any specific comment?	

Location:	**Date:**

Appendix 3 - Profiles of the respondents

Ted Anderson - EY Luxembourg

Ted Anderson is currently Director for the assurance practice in EY Luxembourg. He has been employed for EY since 1996 (8 years of experience in Seattle, US and almost 15 years in Luxembourg) but has been working on the SOC audit field more specifically since 2004. Ted Anderson is an American citizen. He studied business management at Seattle University. His knowledge of the American audit standards developed by the AICPA such as SSAE 18 is a real value-added for this research work. He has got more than 22 years of experience with global asset management, banks and transfer agents. He is now specialized in assurance and advisory engagements for internal control and process improvements.

Bart Kuipers - PwC Brussels

Bart Kuipers is the current Director of the Risk Assurance Service in PwC Brussels. He has been working for PwC for 18 years now and has got 14 years of experience in third-party assurance. He even leads the Third-Party Assurance group for PwC Belgium. It is in this context that he is responsible of ISAE 3402 and ISAE 3000 engagements. From an academic point of view, Bart Kuipers graduated in Economics from the University of Hasselt as well as in Audit from the KU Leuven and the University of Antwerpen.

Bert Truyman - Deloitte Brussels

Bert Truyman is currently Partner and Director in Risk Advisory within Deloitte Brussels. He has been working for the audit company for almost 20 years and has specialized in SOC reporting since 2003. His remarkable professional experience towards TPA engagements led him to handle standards such as SAS 70, ISAE 3402, SSAE 16 and 18. Mr. Truyman is now responsible for internal audit, TPA engagements and compliance services within the Belgian ICT Audit & Assurance Group of Deloitte. He also has a valuable expertise in IT assurance and advisory services. From an academic point of view, Bert Truyman has a Master Degree in Business Engineering with major in Information Technology Management from the University of Antwerpen

Jérôme Wagner - Integrale Insurance Services

Jérôme Wagner has been Head of Internal Audit at Integrale Insurance Services (IIS) since February 2019 and has been working in the internal audit field since 2010. Integral Insurance Services is a service organization and subsidiary of Integrale. It provides internal audit, accounting and actuarial management services for insurance professionals who do not have the sufficient structure. The mother company, Integrale is a Belgian company specializing in group and individual insurance as well as complementary pensions. Mr. Wagner's position makes him responsible, at the same time, for the internal audit of Integrale and for the internal control services provided by IIS. The service organization has been certified ISAE 3402 for many years now. From an academic point of view, Jérôme Wagner graduated in management engineering (Economics and Finance) from the HEC Liège, University of Liège.

Maryline Serafin - Ethias

Maryline Serafin has been Head of Internal Audit for Ethias since December 2008. Although Ms. Serafin does currently not work in a service organization, her interview was selected because of her diversified 20+ year professional experience in the assurance field. She indeed worked for 8 years as an external auditor for KPMG, 6 years as an internal auditor for BNP-Paribas and 7 years at the FSMA (the Belgian financial regulatory agency), including 2 year as the Director of the inspection division. Interviewing this multi-hatted profile was a real added value for this research work. Ms. Serafin has accumulated a legitimate experience with SOC reports with various views on the topic during her ongoing career. From an academic point of view, Maryline Serafin graduated in Business Management from the University of Liège.

Julien Custine - Aedes

Julien Custine is currently Quality Control Manager for the insurance service provider Aedes. He has occupied different positions within this organization since 2011. Aedes is a Belgian insurance firm providing its services in four areas: cars, fire, legal protection and bicycles. The company is accredited ISAE 3402 over its production, claims, accounting and sales services. Mr. Custine is responsible for monitoring the correct application of internal operating rules. From an academic point of view, Julien Custine has bachelor's degree in Law and a master's degree in political science from the UCL.

Appendix 4 - Different outsourcing types

This figure illustrates the 3 different types of outsourcing as explained in Chapter 1:

1. Onshoring (Local);

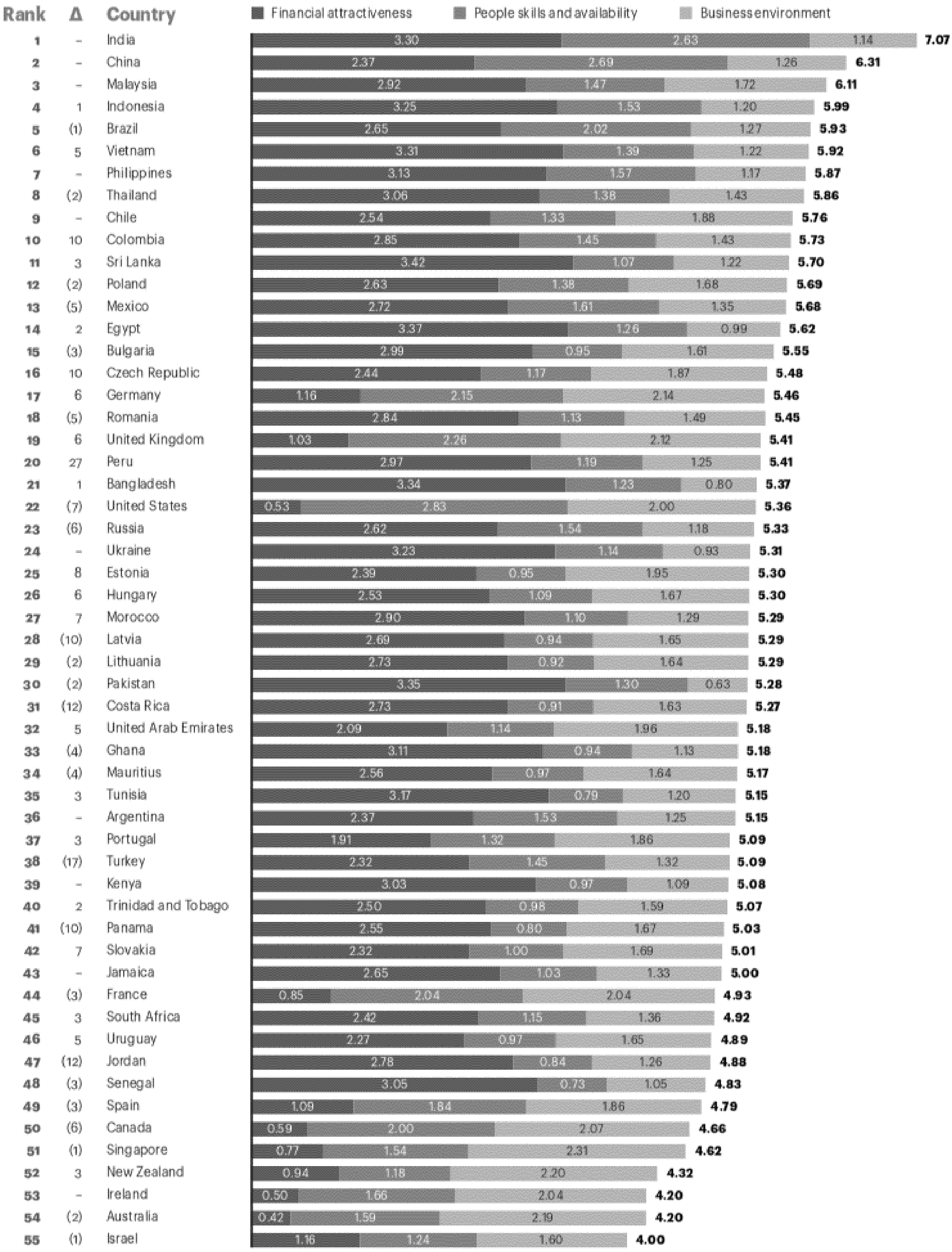
2. Nearshoring; and

3. Offshoring.

Figure 5 - The different outsourcing types

Source: Eastern Peak, Types of Outsourcing: Local, Nearshore and Offshore (2016).

Appendix 5 - Ranking of outsourcing attractiveness by country in 2017



Notes: Δ represents the change in rank since the 2016 Index. For France, Germany, the United Kingdom, and the United States, tier 2 locations are assessed. Numbers may not resolve due to rounding.

Figure 6 - Ranking of outsourcing attractiveness by country in 2017

Source: A.T. Kearney, Global Services Location Index (2017, pp 11).

Appendix 6 - BPO and KPO examples

The following content is taken from the scientific paper: *From business process outsourcing (BPO) to knowledge process outsourcing (KPO): Some issues*, published by Sen and Shiel (2006) in the Human Systems Management Journal. In their paper, the authors provide traditional BPO and emerging KPO examples.

Category	Traditional BPO	Emerging KPO
Supply	Logistics, distribution, back-office	Engineering and design services; design, animation and simulation services; remote education (online tuition) and publishing; warehouse and inventory management; procurement
Demand	Call centers, telemarketing	Market data analysis; branding; negotiation; building customer relationships; customer business assessment; up-selling and cross-selling
Enterprise	IT; HR; payroll; payment processing; finance and accounting	Network management; education and training; tax management; treasury management; risk management; corporate law; due diligence; HR research and information services

Table 5 - BPO and KPO examples

Source: Sen and Shiel, From business process outsourcing (BPO) to knowledge process outsourcing (KPO) (2006, pp.147).

Appendix 7 - Comparison table between BPO and KPO

This comparison table is an extract from the website Key Differences (2015) and summarizes the key characteristics of both BPO and KPO.

BASIS FOR COMPARISON	BPO	KPO
Acronym	Business Process Outsourcing	Knowledge Process Outsourcing
Meaning	BPO refers to the outsourcing of non-primary activities of the organization to an external organization to minimize cost and increase efficiency.	KPO is another kind of outsourcing whereby, functions related to knowledge and information are outsourced to third party service providers.
Based on	Rules	Judgement
Degree of complexity	Less complex	High complex
Requirement	Process Expertise	Knowledge Expertise
Relies on	Cost arbitrage	Knowledge arbitrage
Driving force	Volume driven	Insights driven
Collaboration and Coordination	Low	Comparatively high
Talent required in employees	Good communication skills.	Professionally qualified workers are required.
Focus on	Low level process	High level process

Table 6 - Comparison table between BPO and KPO

Source: Key Differences, Difference Between BPO and KPO (2015).

Appendix 8 - Trust Services Principles: Conceptual Figure

This figure allows to conceptually visualize how Trust Services Principles apply to the different components of the system tested during a SOC 2 or SOC 3 audit

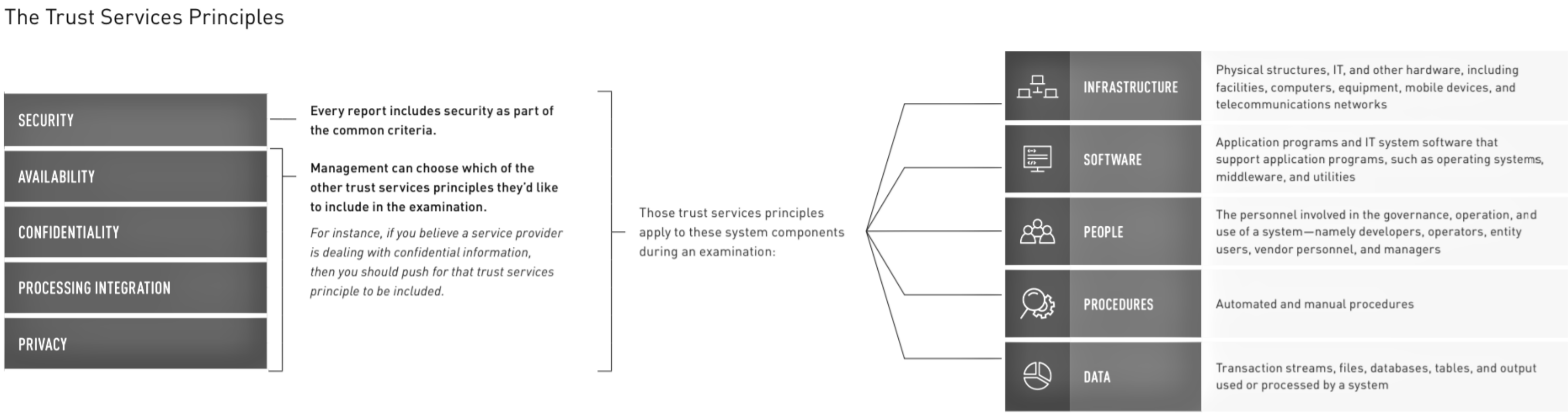


Figure 7 - Trust Services Principles Application

Source: Moss Adams LLP, Why a SOC Report Makes All the Difference? (2017, pp.6).

Appendix 9 - Trust Services Principles: List of details

This appendix provides a large list of elements that can be tested for the five Trust Services Principles.

SECURITY	AVAILABILITY	CONFIDENTIALITY	PROCESSING INTEGRATION	PRIVACY
• IT security policy • Security awareness and communication • Risk assessment • Logical access • Physical access • Environmental controls • Security monitoring • User authentication • Incident management • Asset classification and management • Systems development and maintenance • Personnel security • Configuration management • Change management • Monitoring and compliance	• Availability policy • Backup and restoration • Incident management • Disaster recovery • Business continuity management • Security • Change management • Monitoring and compliance	• Confidentiality policy • Confidentiality of inputs • Confidentiality of data processing • Confidentiality of outputs • Information disclosures (including third parties) • Confidentiality of information in systems development • Incident management • Security • Change management • Monitoring and compliance	• System processing integrity policies • Completeness, accuracy, timeliness, and authorization of inputs, system processing, and outputs • Information tracing from source to disposition • Incident management • Security • Change management • Availability • Monitoring	• Privacy policies • Personally identifiable information (PII) classification • Risk assessment • Incident and breach management • Provision of notice • Choice and consent • Collection • Use and retention • Disposal • Access • Disclosure to third parties • Security for privacy • Quality • Monitoring and enforcement

Table 7 - Elements to test for each Trust Services Principle

Source: Moss Adams LLP, Why a SOC Report Makes All the Difference? (2017, pp.7).

Appendix 10 - The Enron/Andersen scandal case

In his paper *The Case Analysis of the Scandal of Enron* published in the International Journal of Business and Management, Yuhao Li (2010) presents the company Enron as the following:

> Throughout the late 1990s, Enron was almost universally considered one of the country's most innovative companies -- a new-economy maverick that forsook musty, old industries with their cumbersome hard assets in favor of the freewheeling world of e-commerce. The company continued to build power plants and operate gas lines, but it became better known for its unique trading businesses. Besides buying and selling gas and electricity futures, it created whole new markets for such oddball "commodities" as broadcast time for advertisers, weather futures, and Internet bandwidth. (Li, 2010, pp.37)

In the same paper, Li then describes the corporate scandal involving the company with the well-established audit firm Arthur Andersen.

> The Enron scandal, revealed in October 2001, eventually led to the bankruptcy of the Enron Corporation, […], and the dissolution of Arthur Andersen, which was one of the five largest audit and accountancy partnerships in the world. In addition to being the largest bankruptcy reorganization in American history at that time, Enron undoubtedly is the biggest audit failure. It is ever the most famous company in the world, but it also is one of companies which fell down too fast. (Li, 2010, pp.37)

According to Nguyen Huu Cuong (2001), Enron's collapse had been caused by numerous factors. But Nguyen devotes a significant part of his paper explaining the role played by the external audit firm Arthur Andersen.

> In addition to Enron's internal corporate governance structure, Enron's external auditor, Arthur Andersen, also played a key role in contributing to the Enron fiasco. The role of the auditor, generally, is to provide reasonable assurance that audited financial reporting is free from material misstatement, as well as truthfully and fairly presented by management. In doing so, the external auditor is required to be impartial and free from any financial interest in the audit client [...]. With Enron, the external auditor acquiesced in Enron's financial reporting and so deliberately withheld information about the Company's difficulties. Firstly, this could have resulted from the economic bond, as discussed earlier. It is a fact that Arthur Andersen was paid $27 million for non-audit

services and $25 million for audit work from Enron, and this firm was attempting to raise its revenue [...]. Hence, it is probable that the quality of Arthur Andersen's audit work for Enron was impaired by conflicts of interest between protecting its professional reputation by fulfilling its professional responsibilities and being willing to risk such a reputation as a means of keeping its largest client by acquiescing with Enron's management [...]. Moreover, it is also argued that their acquiescence was caused by Arthur Andersen's lack of competence in detecting extremely complicated financial vehicles designed by its client's management. Regardless of the reasons, Arthur Andersen failed to produce a quality audit report; and the action of shredding tons of Enron's documents reflects its failures to fulfil its fiduciary duty. (Nguyen, 2011, pp.590)

Appendix 11 - The WorldCom scandal case

In an article published in *The Guardian,* Mark Tran (2002) described WorldCom as the "America's second-biggest long-distance phone company, built up over the years through a dizzying array of mergers and acquisitions by its founder, Bernard Ebbers" (Tran, 2002).

The article published online just one day after the confessions of accounting irregularity (June 26, 2002) depicts the company as the following:

> At the peak of the telecoms boom, WorldCom was valued at $180bn (£118bn) and employed 80,000 people. WorldCom came into existence as a result of a merger between an obscure long-distance resale company, LDDS (Long Distance Discount Service), and two smaller firms, MFS Communications and UUnet in the early 1990s. The acquisition spree culminated in the 1998 $37bn merger with MCI, America's second-largest long-distance phone company after AT&T. (Tran, 2002)

Here is the summary conclusion of the official *Report of Investigation* written by the Special Investigative Committee of The Board of Directors (SICBD) and published in 2003 on the SEC's website:

> From 1999 until 2002, WorldCom suffered one of the largest public company accounting frauds in history. As enormous as the fraud was, it was accomplished in a relatively mundane way: more than $9 billion in false or unsupported accounting entries were made in WorldCom's financial systems in order to achieve desired reported financial results. [...]. The fraud was the consequence of the way WorldCom's Chief Executive Officer, Bernard J. Ebbers, ran the Company. [...]. That the fraud continued as long as it did was due to a lack of courage to blow the whistle on the part of others in WorldCom's financial and accounting departments; inadequate audits by Arthur Andersen; and a financial system whose controls were sorely deficient. The setting in which it occurred was marked by a serious corporate governance failure. (SICBD, 2003)

Appendix 12 - The Parmalat scandal case

Parmalat is an Italian multinational working in the food and dairy businesses. That European company faced a massive corporate scandal in 2003 in the wake of Enron and WorldCom is America.

The business-dedicated newspaper World Finance revisits this case in an online article published in June 2011. This article explains that: “During the 80s and 90s, Parmalat is hailed as the jewel of Italian commerce, as entrepreneur Calisto Tanzi converts his father’s Parma-based ham retailer into a global dairy and food giant with a specialty for long-life milk” (World Finance, 2011).

The scandal was revealed in two steps.

> In 2003, bondholders learn nearly €4bn ($4.5bn) of funds being held in a Bank of America account don’t exist. The bank dubs the transfer document a forgery and trading in Parmalat shares is frozen. Calisto Tanzi, along with various family members and senior executives, is arrested. (World Finance, 2011)

One year later, following the preliminary investigation, the situation even deteriorated.

> In 2004, Parmalat’s debts are fixed at €14.3bn ($16.1bn), eight times the figure the firm had admitted to. After a series of denials, Bank of America’s former Chief of Corporate Finances in Italy, Luca Sala, admits to participating in a kickback scheme. (World Finance, 2011)

As well as for Enron and WorldCom cases, the responsibility of the two audit companies (Deloitte and Grand Thornton) in charge of Parmalat financial audit during the fraud period was at stake. (Norris, 2004).

Appendix 13 - PIOB's organization chart

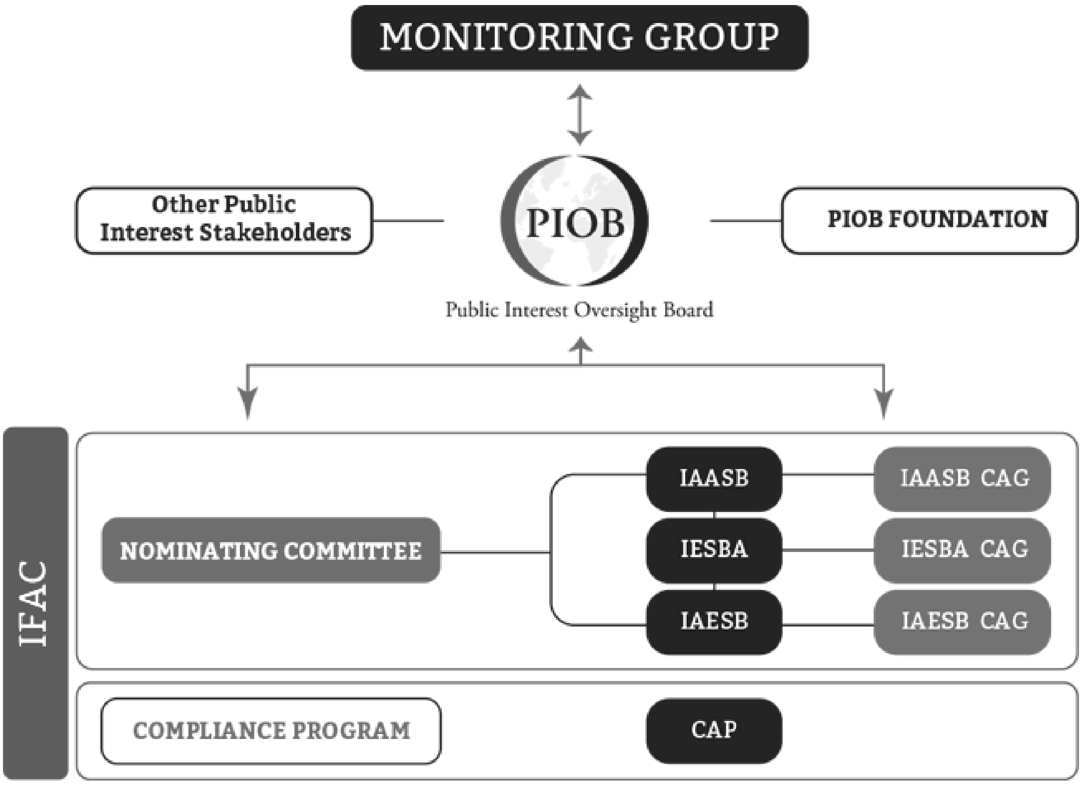


Figure 8 - PIOB's organization chart

Source: PIOB, What is the PIOB? (2019).

The figure above illustrates the structure and the links between the PIOB and the IFAC. On its official website, the Public Interest Oversight Body provides the following description:

> The global architecture of standard setting in the field of audit, assurance, ethics and education consists of a three-tier structure made up of standard setting boards supported by IFAC, independent oversight (PIOB), and accountability to a monitoring body of public authorities (Monitoring Group). (PIOB, 2019)

In its first public report, the PIOB (2006) exposes its mission and its organization structure.

> The PIOB mandate contemplates the exercise of oversight for all of IFAC's "public interest activity committees" [...] which include the work of the International Auditing and Assurance Standards Board (IAASB), the International Ethics Standards Board for Accountants (IESBA), the International Accounting Education Standards Board

> (IAESB) and their respective Consultative Advisory Groups (CAGs). (PIOB, 2006, pp. 3)

As illustrated and explained, each internal board has to collaborate with a Consultative Advisory Group (CAG). In its report, the PIOB describes the CAGs as the following:

> The creation of robust CAGs to provide public scrutiny and input to various standard-setting processes has been an important architectural element of IFAC reform. [...]. The membership of these consultative groups comprises representatives of stakeholder organizations such as regulators, users and preparers of financial statements and development institutions. The role of the CAGs is to provide organized and regular fora where technical consultation on proposed new or revised standards can take place between CAG member bodies and the standard-setting boards. (PIOB, 2006, pp. 4)

The last essential element of this organization chart is the Compliance Advisory Panel (CAP). In its report, the Public Interest Oversight Body depicts its relation with the CAP:

> [...] the PIOB is required to oversee the Compliance Advisory Panel (CAP) of IFAC, a group which evaluates member body compliance with IFAC membership rules, including each member's commitment to implement IFAC audit, ethics and education standards. Of significance, the PIOB has the power to approve or reject nominations of members to all the bodies that it oversees, and to request the removal of the chair if deemed necessary. This authority is viewed as key to enhancing and preserving the independence of IFAC [...] (PIOB, 2006, pp. 4)

Appendix 14 - Organizational structure of the IFAC and the AICPA

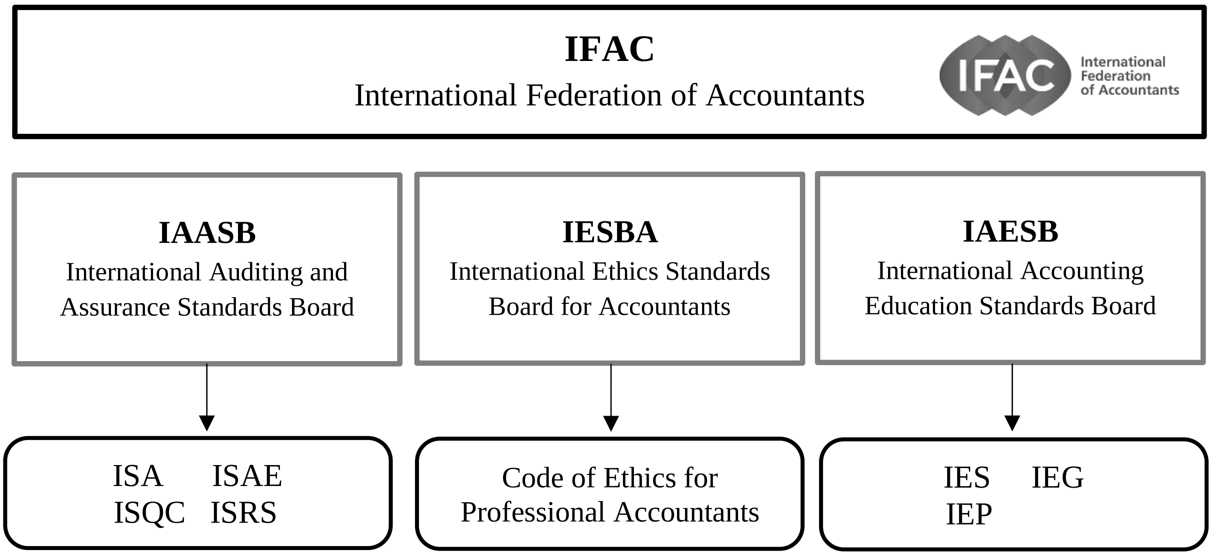


Figure 9 - Organizational structure of the IFAC

Source: Personal creation based on the information found on the IFAC (2019) website.

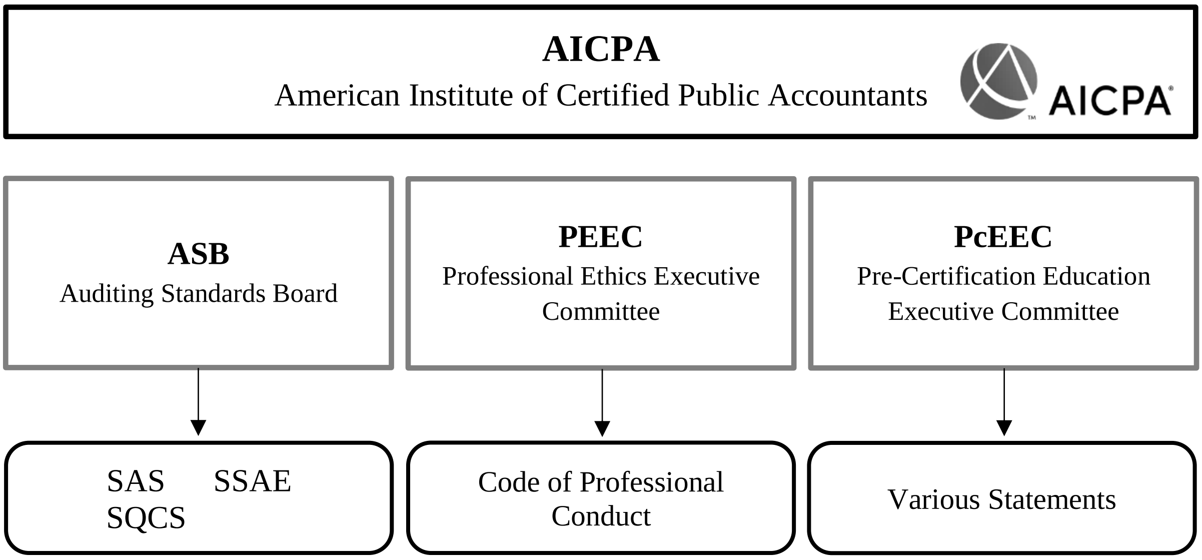


Figure 10 - Organizational structure of the AICPA

Source: Personal creation based on the information found on the AICPA (2019) website.

Appendix 15 - Standard-Setting Organizations Summary Table

	Audit	Ethics	Education	Accounting
IFAC	IAASB	IESBA	IAESB	
AICPA	ASB	PEEC	PcEEC	
IFRS Foundation				IASB
FAF				FASB

Table 8 - Summary table of the different SSO mentioned

Source: Personal creation based on the information gathered through this research work.

All the standard-setting boards discussed in Chapter 3 are represented in this table. It summarizes the application area of each board and the parent organization it belongs to.

Appendix 16 - Link between SOC audits and financial statements audits

This appendix contains the paragraph A1 of ISAE 3402. It explains the link between service organization's control and the financial audit of an entity relying on such organization. The paragraph also provides practical examples.

> **Scope of this ISAE (Ref: Para. 1, 3)**
>
> A1. Internal control is a process designed to provide reasonable assurance regarding the achievement of objectives related to the reliability of financial reporting, effectiveness and efficiency of operations and compliance with applicable laws and regulations. Controls related to a service organization's operations and compliance objectives may be relevant to a user entity's internal control as it relates to financial reporting. Such controls may pertain to assertions about presentation and disclosure relating to account balances, classes of transactions or disclosures, or may pertain to evidence that the user auditor evaluates or uses in applying auditing procedures.
>
> For example, a payroll processing service organization's controls related to the timely remittance of payroll deductions to government authorities may be relevant to a user entity as late remittances could incur interest and penalties that would result in a liability for the user entity.
>
> Similarly, a service organization's controls over the acceptability of investment transactions from a regulatory perspective may be considered relevant to a user entity's presentation and disclosure of transactions and account balances in its financial statements.
>
> The determination of whether controls at a service organization related to operations and compliance are likely to be relevant to user entities' internal control as it relates to financial reporting is a matter of professional judgment, having regard to the control objectives set by the service organization and the suitability of the criteria.

Source: IAASB, 2009, ISAE 3402, par. A1, pp.22.

Appendix 17 - SOC standards, a contextual summary

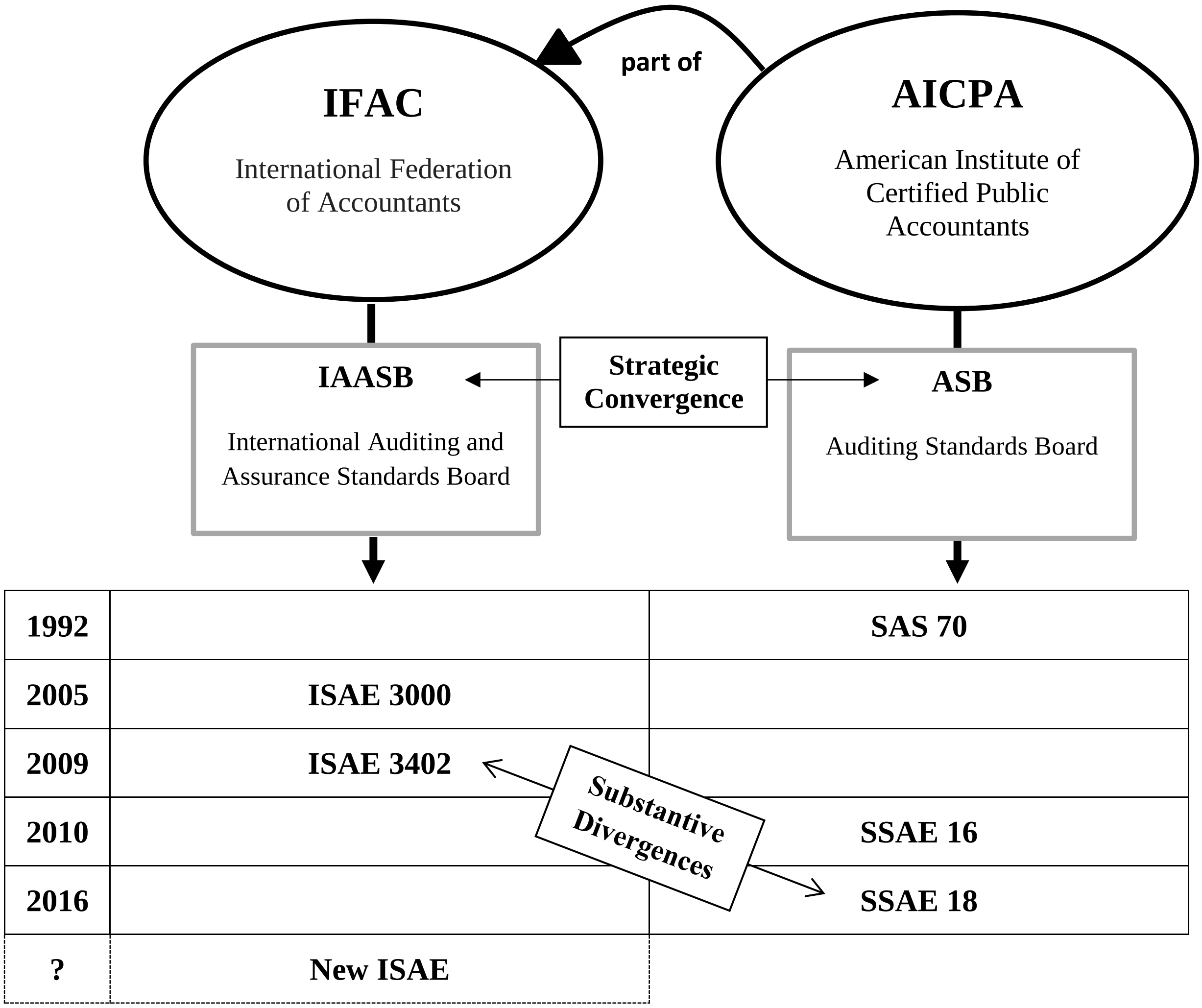


Figure 11 - Summary of the standards leading to the current SOC framework

Source: Personal creation based on the information gathered through this research work.

Appendix 18 - Fraud by service organization personnel

This appendix contains the paragraphs mentioned in Chapter 5 concerning the substantive divergences between ISAE 3402 and SSAE 18. The content here-below are extracts from these two standards. Their purpose is to serve as a support document for the reader.

Obtaining Evidence Regarding the Operating Effectiveness of Controls

Nature and Cause of Deviations

.32 The service auditor should investigate the nature and cause of any deviations identified and should determine whether

a. identified deviations are within the expected rate of deviation and are acceptable. If so, the testing that has been performed provides an appropriate basis for concluding that the control operated effectively throughout the specified period.

b. additional testing of the control or other controls is necessary to reach a conclusion about whether the controls related to the control objectives stated in management's description of the service organization's system operated effectively throughout the specified period.

c. the testing that has been performed provides an appropriate basis for concluding that the control did not operate effectively throughout the specified period.

.33 If, as a result of performing the procedures in paragraph .32, the service auditor becomes aware that any identified deviations have resulted from fraud by service organization personnel, the service auditor should assess the risk that management's description of the service organization's system is not fairly presented, the controls are not suitably designed and, in a type 2 engagement, the controls are not operating effectively.

Source: ASB, 2018c, SSAE 18 (revised), AT-C 320, par. 32-33, pp.11.

Obtaining Evidence Regarding Operating Effectiveness of Controls

Nature and Cause of Deviations

28. The service auditor shall investigate the nature and cause of any deviations identified and shall determine whether:

(a) Identified deviations are within the expected rate of deviation and are acceptable; therefore, the testing that has been performed provides an appropriate basis for concluding that the control is operating effectively throughout the specified period;

(b) Additional testing of the control or of other controls is necessary to reach a conclusion on whether the controls relative to a particular control objective are operating effectively throughout the specified period; or

(Ref: Para. A25)

(c) The testing that has been performed provides an appropriate basis for concluding that the control did not operate effectively throughout the specified period.

Source: IAASB, 2009, ISAE 3402, par. 28, pp.13-14.

Appendix 19 - Anomalies

This appendix contains a paragraph mentioned in Chapter 5 concerning the substantive divergences between ISAE 3402 and SSAE 18. The content here-below is an extract from the international standard. Its purpose is to serve as a support document for the reader.

Obtaining Evidence Regarding Operating Effectiveness of Controls

Nature and Cause of Deviations

29. In the extremely rare circumstances when the service auditor considers a deviation discovered in a sample to be an anomaly and no other controls have been identified that allow the service auditor to conclude that the relevant control objective is operating effectively throughout the specified period, the service auditor shall obtain a high degree of certainty that such deviation is not representative of the population. The service auditor shall obtain this degree of certainty by performing additional procedures to obtain sufficient appropriate evidence that the deviation does not affect the remainder of the population.

Source: IAASB, 2009, ISAE 3402, par. 29, pp.14.

Appendix 20 - Direct assistance

This appendix contains the paragraphs mentioned in Chapter 5 concerning the substantive divergences between ISAE 3402 and SSAE 18. The content here-below are extracts from the American standard. Their purpose is to serve as a support document for the reader.

Using the Work of Internal Auditors

.39 When the practitioner expects to use the work of the internal audit function in obtaining evidence or to use internal auditors to provide direct assistance, the practitioner should determine whether the work can be used for purposes of the examination by evaluating (Ref: par. A44–.46)

a. the level of competence of the internal audit function or the individual internal auditors providing direct assistance;

b. the extent to which the internal audit function's organizational status and relevant policies and procedures support the objectivity of the internal audit function or for internal auditors providing direct assistance, the existence of threats to the objectivity of those internal auditors and the related safeguards applied to reduce or eliminate those threats; and

c. when using the work of the internal audit function, the application by the internal audit function of a systematic and disciplined approach, including quality control.

.41 Prior to using internal auditors to provide direct assistance, the practitioner should obtain written acknowledgment from the responsible party that internal auditors providing direct assistance to the practitioner will be allowed to follow the practitioner's instructions, and that the responsible party will not intervene in the work the internal auditor performs for the practitioner.

.42 When using internal auditors to provide direct assistance to the practitioner, the practitioner should direct, supervise, and review the work of the internal auditors.

.44 Before the conclusion of the engagement, the practitioner should evaluate whether the use of the work of the internal audit function or the use of internal auditors to provide direct assistance results in the practitioner still being sufficiently involved in the examination given the practitioner's sole responsibility for the opinion expressed.

Source: ASB, 2018c, SSAE 18 (revised), AT-C 205, par. 39,41-42,44, pp. 9-10.

Appendix 21 - Documentation completion

This appendix contains the paragraphs mentioned in Chapter 5 concerning the substantive divergences between ISAE 3402 and SSAE 18. The content here-below are extracts from these two standards and the ISQC 1 norm. Their purpose is to serve as a support document for the reader.

Documentation

50. The service auditor shall assemble the documentation in an engagement file and complete the administrative process of assembling the final engagement file on a timely basis after the date of the service auditor's assurance report.

Source: IAASB, 2009, ISAE 3402, par. 50, pp.18.

Engagement Documentation

.35 The practitioner should assemble the engagement documentation in an engagement file and complete the administrative process of assembling the final engagement file no later than 60 days following the practitioner's report release date.

Source: ASB, 2018a, SSAE 18 (revised), AT-C 105, par. 35, pp. 10.

Engagement Documentation

Completion of the Assembly of Final Engagement Files

A54 Law or regulation may prescribe the time limits by which the assembly of final engagement files for specific types of engagement is to be completed. Where no such time limits are prescribed in law or regulation, paragraph 45 requires the firm to establish time limits that reflect the need to complete the assembly of final engagement files on a timely basis. In the case of an audit, for example, such a time limit would ordinarily not be more than 60 days after the date of the auditor's report.

Source: IAASB, 2010, ISQC 1, par. A54, pp.30.

Appendix 22 - Subsequent events and subsequently discovered facts

This appendix contains the paragraphs mentioned in Chapter 5 concerning the substantive divergences between ISAE 3402 and SSAE 18. The content here-below are extracts from these two standards. Their purpose is to serve as a support document for the reader.

Considering Subsequent Events and Subsequently Discovered Facts

.48 The practitioner should inquire whether the responsible party, and if different, the engaging party, is aware of any events subsequent to the period (or point in time) covered by the examination engagement up to the date of the practitioner's report that could have a significant effect on the subject matter or assertion and should apply other appropriate procedures to obtain evidence regarding such events. If the practitioner becomes aware, through inquiry or otherwise, of such an event, or any other event that is of such a nature and significance that its disclosure is necessary to prevent users of the report from being misled, and information about that event is not adequately disclosed by the responsible party in the subject matter or in its assertion, the practitioner should take appropriate action. (Ref: par. A54–A56)

Source: ASB, 2018b, SSAE 18 (revised), AT-C 205, par. 48, pp. 11.

Subsequent Events

43. The service auditor shall inquire whether the service organization is aware of any events subsequent to the period covered by the service organization’s description of its system up to the date of the service auditor’s assurance report that could have a significant effect on the service auditor’s assurance report. If the service auditor is aware of such an event, and information about that event is not disclosed by the service organization, the service auditor shall disclose it in the service auditor’s assurance report.

Source: IAASB, 2009, ISAE 3402, par. 43, pp.17.

Considering Subsequent Events and Subsequently Discovered Facts (Ref: par. 48–49)

A54 For certain subject-matter AT-C sections, specific subsequent events requirements and related application guidance have been developed for engagement performance and reporting.

A55 Procedures that a practitioner may perform to identify subsequent events include

inquiring about and considering information

• contained in relevant reports issued during the subsequent period by internal auditors, other practitioners, or regulatory agencies.

• obtained through other professional engagements for that entity.

A56 If the responsible party refuses to disclose a subsequent event for which disclosure is necessary to prevent users of the practitioner's report from being misled, appropriate actions the practitioner may take include

• disclosing the event in the practitioner's report and modifying the practitioner's opinion.

• withdrawing from the engagement.

Source: ASB, 2018b, SSAE 18 (revised), AT-C 205, par. A54-A56, pp. 31.

Appendix 23 - Internal audit report

This appendix contains a paragraph mentioned in Chapter 5 concerning the substantive divergences between ISAE 3402 and SSAE 18. The content here-below is an extract from the US standard. Its purpose is to serve as a support document for the reader.

> **Obtaining an Understanding of the Service Organization's System and Assessing the Risk of Material Misstatement**
>
> .23 The service auditor should read the reports of the internal audit function and regulatory examinations that relate to the services provided to user entities and the scope of the engagement, if any, to obtain an understanding of the nature and extent of the procedures performed and the related findings. The findings should be taken into consideration as part of the risk assessment and in determining the nature, timing, and extent of the tests.

Source: ASB, 2018c, SSAE 18 (revised), AT-C 320, par. 23, pp. 9.

Appendix 24 - Required written representations

This appendix contains the paragraphs mentioned in Chapter 5 concerning the substantive divergences between ISAE 3402 and SSAE 18. The content here-below are extracts from these two standards. Their purpose is to serve as a support document for the reader. Please note that only the extra elements required by SSAE 18 for the written report are displayed, as well the ISAE 3402 paragraph 38, to have a full view on the topic.

Written Representations

.50 The practitioner should request from the responsible party written representations in the form of a letter addressed to the practitioner. The representations should (Ref: par. A59–A62)

[...]

c. state that all known matters contradicting the subject matter or assertion and any communication from regulatory agencies or others affecting the subject matter or assertion have been disclosed to the practitioner, including communications received between the end of the period addressed in the written assertion and the date of the practitioner's report.

d. acknowledge responsibility for

   i. the subject matter and the assertion;
   ii. selecting the criteria, when applicable; and
   iii. determining that such criteria are appropriate for the responsible party's purposes.

[...]

g. if applicable, state that the responsible party believes the effects of uncorrected misstatements are immaterial, individually and in the aggregate, to the subject matter. (Ref: par. A62)

h. if applicable, state that significant assumptions used in making any material estimates are reasonable.

[...]

Source: ASB, 2018b, SSAE 18 (revised), AT-C 205, par. 50, pp. 11-12.

Written Representations

.36 In addition to the written representations from management required by section 205, the service auditor should request written representations indicating that it has disclosed to the service auditor any of the following of which it is aware: (Ref: par. A53–A56)

[...]

b. Knowledge of any actual, suspected, or alleged fraud by management or the service organization's employees that could adversely affect the fairness of the presentation of management's description of the service organization's system or the completeness or achievement of the control objectives stated in the description.

Source: ASB, 2018c, SSAE 18 (revised), AT-C 320, par. 36, pp. 12.

Written Representations

38. The service auditor shall request the service organization to provide written representations: (Ref: Para. A42)

(a) That reaffirm the assertion accompanying the description of the system;

(b) That it has provided the service auditor with all relevant information and access agreed to; and

(c) That it has disclosed to the service auditor any of the following of which it is aware:

(i) Non-compliance with laws and regulations, fraud, or uncorrected deviations attributable to the service organization that may affect one or more user entities;

(ii) Design deficiencies in controls;

(iii) Instances where controls have not operated as described; and

(iv) Any events subsequent to the period covered by the service organization's description of its system up to the date of the service auditor's assurance report that could have a significant effect on the service auditor's assurance report.

Source: IAASB, 2009, ISAE 3402, par. 38, pp.16.

Written Representations

51 When the engaging party is not the responsible party, and the responsible party refuses to provide the representations in paragraph .50 in writing, the practitioner should make inquiries of the responsible party about, and seek oral responses to, the matters in paragraph .50. (Ref: par. A63)

Source: ASB, 2018b, SSAE 18 (revised), AT-C 205, par. 51, pp. 12.

Appendix 25 - Additional elements of the report under SSAE 18

This appendix contains the paragraphs mentioned in Chapter 5 concerning the elements of the report required by SSAE 18, but not by ISAE 3402. The content here-below highlights the most significant additional elements included in the service auditor's report required by the US standard. The paragraph 40 of SSEA 18, AT-C 320, regard SOC 1 reports from Type II and the paragraph 41 targets the Type I reports. This appendix only displays the paragraph 40 since paragraphs 40 and 41 are almost similar and that Type II reports are the most common. The purpose of such extracts is to serve as a support document for the reader.

Content of the Service Auditor's Report

.40 A service auditor's type 2 report should include the following: (Ref: par A59–A60)

[...]

d. A statement that the controls and control objectives included in the description are those that management believes are likely to be relevant to user entities' internal control over financial reporting, and the description does not include those aspects of the system that are not likely to be relevant to user entities' internal control over financial reporting.

[...]

f. A reference to management's assertion and a statement that management is responsible for

[...]

iv. identifying the risks that threaten the achievement of the control objectives.

v. selecting the criteria.

vi. designing, implementing, and documenting controls that are suitably designed and operating effectively to achieve the related control objectives stated in the description of the service organization's system.

Source: ASB, 2018c, SSAE 18 (revised), AT-C 320, par. 40, pp. 13-14.

Appendix 26 - Independence Concept

This appendix contains the paragraphs mentioned in Chapter 6 regarding the principle of independence for auditor. The purpose of such extracts is to serve as a support document for the reader.

Independence of mind and appearance

900.4 Independence is linked to the principles of objectivity and integrity. It comprises:

(a) Independence of mind - the state of mind that permits the expression of a conclusion without being affected by influences that compromise professional judgment, thereby allowing an individual to act with integrity, and exercise objectivity and professional skepticism

(b) Independence in appearance - the avoidance of facts and circumstances that are so significant that a reasonable and informed third party would be likely to conclude, weighing all the specific facts and circumstances, that a firm's, or a member of the audit or assurance team's, integrity, objectivity or professional skepticism has been compromised.

Source: IESBA, 2018, Code of Ethics, Part 4B, par. 900.4, pp. 155.

Assertions-based Assurance Engagements

R900.18 When performing an assertion-based assurance engagement:

(a) The assurance team members and the firm shall be independent of the assurance client (the party responsible for the subject matter information, and which might be responsible for the subject matter) as set out in this Part. The independence requirements set out in this Part prohibit certain relationships between assurance team members and (i) directors or officers, and (ii) individuals at the client in a position to exert significant influence over the subject matter information;

[...]

Source: IESBA, 2018, Code of Ethics, Part 4B, par. R900.18, pp. 157.

Identifying Threats

120.6 A3 Threats to compliance with the fundamental principles fall into one or more of the following categories:

(a) Self-interest threat – the threat that a financial or other interest will inappropriately influence the professional accountant's judgment or behavior;

(b) Self-review threat – the threat that a professional accountant will not appropriately evaluate the results of a previous judgment made or service performed by the professional accountant, or by another individual within the professional accountant's firm or employing organisation, on which the accountant will rely when forming a judgment as part of providing a current service;

(c) Advocacy threat – the threat that a professional accountant will promote a client's or employer's position to the point that the professional accountant's objectivity is compromised;

(d) Familiarity threat ─ the threat that due to a long or close relationship with a client or employer, a professional accountant will be too sympathetic to their interests or too accepting of their work; and

(e) Intimidation threat – the threat that a professional accountant will be deterred from acting objectively because of actual or perceived pressures, including attempts to exercise undue influence over the professional accountant.

Source: IESBA, 2018, Code of Ethics, Part A, par. 120.6 A3, pp. 23.

TABLE OF CONTENTS

EXECUTIVE SUMMARY

In an increasingly globalized world, outsourcing is a major phenomenon which has been interconnecting companies for decades. Trying to imagine a world without external service providers is thus virtually impossible nowadays. Outsourcing has enabled companies to externalize important parts of their non-core processes. But this externalization has also led to a transfer of controls (on these processes) to service organizations, while the risks related have remained part of the primary entities.

This asymmetry explains the increase of third-party assurance (TPA) audits, which result in Service Organization Control (SOC) reports. Such reports aim to provide trust and confidence for service organizations over their internal control system to their clients. Among these reports, the SOC 1 report is the most requested certification for service providers. This topic is however not well known by audit professionals and service companies in general. Two major standards share the hegemony over the regulation of this type of report worldwide: the international ISAE 3402 standard and the American SSAE 18 standard. The latter has only been in application since May 2017, and has not been completely assimilated by practitioners yet.

For the above-mentioned reasons, this research thesis addresses Service Organization Control Reporting in general and focuses more specifically on the convergences and divergences between the two standards cited above. The purpose of this thesis is to present the concepts surrounding SOC reporting as well as to provide a quality research work for academics and professionals eager to improve their understanding on the topic.

This work is based on a qualitative approach. Since no quantifiable measure is possible, the research methodology indeed combines information from both the managerial literature and interviews. They were conducted with specialized business professionals, to obtain practical facts beyond the theorical limitations of the literature. To achieve this research work, several research questions have been established and used as a guideline to structure the thesis.

This work maps, among other things, the current normative prominence of those standards. It also demonstrates that ISAE 3402 and SSAE 18 are extremely convergent standards while having some diverging, although limited, elements. This similarity of requirements permits the drafting of joint reports by auditors for service organizations requesting it.

Key words: Service Organization Control, SOC Reporting, Third-Party Assurance, Assurance Engagements Standards, ISAE 3402, SSAE 18, SOC 1.