

# Risk Management and Internal Control in the Public Sector: An In-Depth Analysis of Belgian Social Security Public Institutions

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## ABSTRACT

This paper provides an in-depth analysis of risk management and internal control practices within Belgian social security public institutions (SSPI). The findings show that: (1) risk management and internal control are not highly developed; (2) internal control is more developed than risk management; and (3) risk management concepts like risk identification and evaluation are part of internal control, rather than internal control being part of risk management. The fact that the traditional internal control philosophy (focusing on conformance) is more wide-spread than the recent risk management philosophy (focusing on performance) could be a reason why the performance requirements of the SSPI are not met.

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## 1 Introduction

In Belgium, the 15 social security public institutions (SSPI) are decentralized agencies that have been placed under the close supervision of the federal government<sup>(1)</sup>. At the end of the 1990's, Belgium's federal government orchestrated several reforms, inspired by *New Public Management* (NPM) concepts, in attempts to modernize public administrations, with the aim of increasing public performance and responsiveness (Stassart and De Visscher, 2005). One of these reforms was the adoption of a contractualisation policy between the federal government and decentralised agencies, such as the SSPI, aiming to improve their overall performance. The first agreements were signed in 2002. These contractualisation policies fit within the overall trend in governance from conformance, focusing on checking whether past events are in compliance with legal or budgetary requirements, to performance (outcome-based) which is more ex post oriented (Keasey and Wright, 1993; Short et al., 1999).

For the past two decades, performance arrangements between the federal government and public administrations have been a major issue for debate in NPM (Rabrenovic, 2000). NPM, taking agency theory as a starting point from which to study the relationship between the federal government and the administration, suggests a contractual approach to manage this relationship, applying a dichotomous design (Hood, 1991, 2006; Pollitt and Bouckaert, 2006). According to such a model, which characterises most public administrations' relationship with the federal government, there is a clear distinction between the political sphere, which must develop the public policy, and the administrative sphere, which must implement that public policy. Thus, politicians are responsible for setting the political objectives, whereas the administration is in charge of their implementation. According to the agency theory, politicians (the 'principals') decide, for reasons of effectiveness, to engage another party with more specialized and technical skills (the 'agents', here the SSPI) to carry out a certain number of tasks on their behalf (stipulated in an executive contract). In other words, politicians delegate their own responsibilities (read 'power') to the SSPI via a contract. By consequence, the SSPI (represented by its senior managers) are accountable to the politicians for the performance of their administration. Goddard (2005) calls this political accountability.

Two evaluation reports of the contractual performance agreements within the SSPI, from 2004 and 2005, show that minimum quality requirements for performance were not being met. It was suggested that, besides a lack of staff, the absence of well-developed risk management and internal control practices within the SSPI is a major reason for this deficiency (Legrain, 2005). More particularly, these reports note that *"Potential influential factors and risks were little identified and charted by the institutions during the drawing up of the executive performance agreements contract. As for the identified influential factors and risks, no safety margin has ever been established or negotiated between the State and the institutions, and,*

1 These SSPI deal with pensions, unemployment benefits, insurance for industrial accidents, insurance for occupational diseases, family benefits, illness and disability insurance, and holiday pay.

*without a safety margin, it is almost impossible to determine if the factor has had a real influence on the realization of the performance agreement contract. Would a negative influential factor have been noted, no alternative engagement would have been proposed or negotiated between the State and the institutions” (Legrain, 2005: 67).*

This paper aims to deliver an in-depth analysis of risk management and internal control practices within the Belgian SSP1. As Barrett (2005) argues, effective risk management is the corner stone of good governance and can lead to improved overall performance resulting in better service delivery, more efficient use of resources, and better project management, as well as helping to minimize waste, fraud and poor value-for-money decision-making. Therefore, we assume that the successful implementation of risk management and internal control, in accordance with international frameworks like ERM (COSO, 2004) and INTOSAI (2004), would have a positive impact upon the performance engagements between the SSP1 and the federal government, and more generally on their overall performance. According to those frameworks, an effective and integrated risk management and internal control system could help to ensure that the objectives of an organization are achieved (COSO, 2004). Since SSP1 were the first federal public administrations in Belgium to implement innovative managerial reforms, such as the contractualisation policy, the conclusions of this study are rather generic and can be extrapolated to other public administrations that are implementing similar reforms.

The remainder of this paper is structured as follows. First, the paper introduces risk management and internal control in general, as well as within the public sector. Second, certain methodological details are provided. Third, current risk management and internal control practices within the Belgian SSP1 are analysed. The paper ends with conclusions and a discussion.

## 2 Risk Management and Internal Control: Background

It is important to distinguish between social risk management, which focuses on so-called public risks, and organizational risk management, which focuses on strategic, operational, financial and compliance risks, the latter having been more common in the private sector (Fone and Young, 2005). As Fone and Young (2005) note *“Risks move into the public domain when there is a high level of uncertainty and when the risk is either externality-produced or non-appropriable, and/or the risk cannot be distributed privately to the responsible parties with the ability to bear the risk.”* Although there are overlaps between these two concepts, the first represents the realm of politicians, while the second represents management practice (Fone and Young, 2005). This study addresses organizational risk management within the Belgian SSPI.

### 2.1 Internal Control versus Enterprise Risk Management

Given the increased focus on risks and their impact on an entity's overall performance, in 2004, the *Committee of Sponsoring Organizations of the Treadway Commission* (COSO) updated its first internal control framework. This first framework (COSO I) had been published in 1992 and became a benchmark from which public and private organisations could establish and improve their internal control system. The updated framework introduced the concept of *Enterprise Risk Management* (ERM) and considered internal control as an integral part of risk management <sup>(2)</sup>.

Whereas internal control is traditionally associated with keeping the organisation under control, mainly via control activities (for example policies, procedures, performance measures, segregation of duties), ERM is more linked with strategic decision-making and applied across all processes and units of an organisation. The role of risk management in corporate governance, and specifically, in determining organizational exposures, opportunities and priorities, creates the need for risk to be considered during strategic and business planning activities. That is, risk management strategies should be fully integrated with the strategic and business planning approaches of entities (Barrett, 2005). In other words, risk should be treated as a strategic issue. In addition, whereas internal control is more associated with the conformance dimension of governance, ERM is more focusing

<sup>2</sup> The ERM framework defines risk management as “a process, affected by an entity's board of directors, management and other personnel, applied in strategy setting and across the entity, designed to identify potential events that may affect the entity, and manage risks to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives” (COSO, 2004). This framework consists of eight interrelated components: (1) internal environment; (2) objective setting; (3) event identification; (4) risk assessment; (5) risk response; (6) control activities; (7) information and communication; and (8) monitoring (COSO, 2004).

on the performance (outcome) dimension. Moreover, in ERM the positive side of risk is more strongly emphasized by separately discussing negative and positive outcomes (opportunities). The idea of integrating risk across an organization and risk management being embedded in its culture is essential to the success of the risk management process. Among the most critical challenges is determining how much risk an entity is prepared to, and does, accept as it strives to implement the government's agenda and/or create value in the public sector.

## 2.2 The INTOSAI Framework

Public organisations often adhere to the standards of the *International Organisation of Supreme Audit Institutions* (INTOSAI), which explicitly rely on the COSO frameworks, but have been adapted slightly to address the specificities of the public sector (INTOSAI, 2004). Internal control in public sector organizations should be understood within the context of the specific characteristics of these organizations, i.e. their focus on meeting social or political objectives; their use of public funds; the importance of the budget cycle; the complexity of their performance (that calls for a balance between traditional values like legality, integrity and transparency and modern, managerial values like efficiency and effectiveness); and the correspondingly broad scope of their public accountability.

In 2004, INTOSAI decided to update its previous guidelines (1992) to explicitly incorporate new public control concerns, such as ethical behaviour and the prevention and detection of fraud, as well as principles from the new ERM framework, as follows: *"The internal control framework is an integral process that is affected by an entity's management and personnel and is designed to address risks and to provide reasonable assurance that in pursuit of the entity's mission, the following general objectives are being achieved: (1) executing orderly, ethical, economical, efficient and effective operations; (2) fulfilling accountability obligations; (3) complying with applicable laws and regulations; and (4) safeguarding resources against loss, misuse and damage"* (INTOSAI, 2004). With this new focus on risks, the COSO vision on risk management 'officially' becomes a standard of practice within public administrations. Nevertheless, they do not call it 'risk management' but stick to the more traditional label of 'internal control' (cf. COSO I). INTOSAI stated in 2004 that its guidelines will need to be developed further and refined over time to take into account the impact of new developments in risk management (INTOSAI, 2004).



## 2.3 Risk Management and Internal Control in the Public Sector

The frameworks described in the previous section have strongly influenced the development of risk management and internal control practices in the public sector, in both North America and Europe. The federal government in Belgium mentions these standards explicitly in their recent Royal Decrees (Belgisch Staatsblad, 2007a; 2007b) concerning the development of internal control, risk management and internal audits in federal public administrations.

The study by Sterck et al. (2005) was one of the first international studies on internal control practices in the public sector, and provided interesting findings on the internal control frameworks used in several countries that were considered pioneers at the time. For instance, Australia has established a central control model explicitly referring to the five components of the first coso internal control framework. In Sweden, most public institutions used a combination of the approaches recommended by the government (based upon the coso framework) together with specific systems and procedures that have been developed taking into account internal factors like organization size and the type of activities performed. Within the federal government of the United States of America, the *Standards for Internal Control*, also based on the coso framework, provided an overall internal control framework for identifying and addressing major performance management challenges and high internal risks (Sterck et al., 2005).

At the same time, other countries seemed to be more proactive in implementing further risk management. Responding to the need to strengthen risk management as a priority on the government management agenda, the Treasury Board of Canada Secretariat (2001) developed the Integrated Risk Management Framework. The Framework provides guidance to adopt a more holistic approach to managing risk. The application of this Framework is expected to enable employees and organizations to better understand the nature of risk, and to manage it more systematically. This Framework also requires an ongoing assessment of potential risks for an organization at every level and then aggregating the results at the corporate level to facilitate priority setting and improved decision-making. Integrated risk management tends to become embedded in the organization's corporate strategy and shape a risk management culture across the organization.

In 2004, in the United Kingdom (UK), an update of the framework for corporate governance was issued, defining the principles that should underpin the governance of each local authority in five dimensions of its activities, one of which is risk management and internal control (CIPFA, 2004). This framework clearly stipulates that good governance means taking informed, transparent decisions and managing risk. Risk management is important to the successful delivery of public services. An effective risk management system identifies and assesses risks, decides on appropriate responses and then provides assurance that the

chosen responses are effective. A risk management system also supports the annual statement on internal control that many public service organizations in the UK now have to produce. Appropriate responses to risk will include implementing internal controls, insuring against the risk, terminating the activity that is causing the risk, modifying the risk or, in some circumstances, accepting the risk.

In Australia, it was recognised in 2005 that risk management in the public sector that maintains the traditional insular, or 'silo', approach, fails to provide reliable ways to evaluate an organisation's overall risk position and establish appropriate risk treatments for both assurance and performance purposes. Thus, a measure of the maturity of risk management in the Australian public sector is the extent to which entities have embraced organisation-wide risk management (so-called 'enterprise risk management' in the private sector) and integrated it with their strategic and operational objectives (Barrett, 2005).

### 3 Research Questions

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This paper attempts to answer two research questions:

- 1° *To what extent have Belgian social security public institutions developed risk management and internal control practices?*
- 2° *To what extent are current risk management and internal control practices within the Belgian social security public institutions (SSPI) in line with best practices, as stipulated by international frameworks (ERM, INTOSAI)?*

## 4 Methodology

### 4.1 Questionnaire

The currently-reported study adopted a self-assessment tool that was based upon the frameworks described above (ERM and INTOSAI), in order to assess risk management and internal control practices within the Belgian SSPI. A questionnaire was developed that measured five dimensions of risk management and internal control. The first dimension describes the basic *attributes* of risk management and internal control (conception, competence and method), as currently implemented. The second dimension measures to what extent the *objectives* of risk management and internal control are defined and understood by the respondents. The third dimension refers to the risk management and internal control *mandate*. More specifically, it measures to what extent risk identification, evaluation, management and monitoring have been put into place. With respect to internal control, this third dimension measures to what extent the control environment, control processes and the information system are taken into account, as well as to what extent risk identification and evaluation are included in internal control. The fourth dimension assesses to what extent risk management and internal control are *integrated* within the organisation (e.g., a common approach applicable to the whole organization, relationship with objectives, integrated with the strategic and operational planning process). The fifth dimension evaluates whether risk management and internal control are *monitored* (internally and externally). Each dimension is measured using one or more questions. All dimensions, except integration, are measured using a dichotomous response scale (yes/no). Dimension four (integration) is measured using a response scale that ranges from '1' (no integration) to '6' (full integration).

### 4.2 Participating SSPI

All Belgian SSPI were contacted and 14 of the 15 SSPI completed the questionnaire in 2006. Three measures of organizational size were included in the questionnaire. All three demonstrated a high degree of diversity, in terms of the size of the responding SSPI. The staff size within the 14 SSPI ranged from 15 to 4,289 full-time employees (FTE), with a mean of 881 FTE (std. deviation = 1,134 FTE). The operating budget (2005) ranged from 100,000 euro to 253 million euro; and the policy budget (2005) ranged from 0 to 50 billion euro.

## 5 Empirical Results

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### 5.1 Descriptive Results per Dimension

Table 1 (3) provides detailed descriptive results for the different items within each of the five dimensions of risk management (internal control) and Table 2 (4) provides the average scores for each dimension of risk management (internal control), indicating the degree of convergence of existing practices with international frameworks. For dimensions 1, 2, 3 and 5, the higher the score, the more developed and more converged that dimension is towards international frameworks. For dimension 4, the higher the score, the more risk management and internal control have been integrated. In this section, the most remarkable results will be highlighted.

Table 1: Descriptive statistics risk management (per item)

	Frequency	Percentage		Frequency	Percentage
<b>Panel A: Attributes</b>			<b>(Panel C: Mandate)</b>		
▶ Conception			▶ Risk Evaluation		
▷ Does there exist a risk management charter?	2	14.3	▷ Does risk management, as currently implemented in your organization, evaluate the impact of potential risks?	6	42.9
▷ Does there exist risk management objectives?	5	35.7	▷ Does risk management, as currently implemented in your organization, evaluate the likelihood of potential risks?	6	42.9
▷ Does there exist clear norms with respect to the different aspects of risk management?	3	21.4	▷ Does risk management, as currently implemented in your organization, evaluate the risk tolerance?	4	28.6
▷ Do these norms refer to internationally accepted norms (e.g. COSO)?	1	7.1	▷ Does risk management, as currently implemented in your organization, provide a risk hierarchy?	4	28.6
▶ Competence			▶ Risk Management		
▷ Did personnel get training on risk management?	5	35.7	▷ Does risk management, as currently implemented in your organization, identify who is accountable for risks?	5	35.7
▷ Does there exist a system allowing personnel to share experiences and examples with respect to risk management?	1	7.1	▷ Does risk management, as currently implemented in your organization, develop risk responses?	5	35.7
▶ Method			▶ Risk Monitoring		
▷ Does there exist a risk inventory?	4	28.6	▷ Does there exist a permanent risk monitoring system?	2	14.3
▷ Is risk management performed in an intuitive way using qualitative evaluation methods?	5	35.7		Average Score (1-6)	Std. Deviation
▷ Is risk management performed in a formal way using quantitative evaluation methods?	2	14.3	<b>Panel D: Integration</b>		
<b>Panel B: Objectives</b>			▷ Is risk management applied to all organizational objectives?	2.71	1.77
▷ Does risk management provide a reasonable assurance with respect to the safeguarding of assets?	7	50.0	▷ Does there exist a common risk management approach applicable to the whole organization?	2.29	1.54
▷ Does risk management provide a reasonable assurance with respect to the achievement of objectives?	6	42.9	▷ Is the risk identification related to the objectives?	2.50	1.65
▷ Does risk management allow anticipating new opportunities?	6	42.9	▷ Are the different elements of risk management integrated with the day-to-day functioning of the organization?	2.43	1.65
			▷ Are the different elements of risk management integrated with the strategic and operational planning process?	2.50	1.70
			▷ Are the vision, objectives and principles of risk management communicated throughout the organization?	2.14	1.41
<b>Panel C: Mandate</b>					
▶ Risk Identification			Frequency Percentage		
▷ Does risk management, as currently implemented in your organization, identify internal risks?	6	42.9	<b>Panel E: Monitoring</b>		
▷ Does risk management, as currently implemented in your organization, identify external risks?	5	35.7	▷ Does there exist an internal evaluation of the risk management process?	3	21.4
			▷ Does there exist an external evaluation of the risk management process?	0	0

Table 2: Average scores risk management (per dimension)

Dimension	N	Min	Max	Mean	Std. Deviation
Panel A: Attributes	14	0	.67	.22	.23
Conception	14	0	.75	.20	.31
Competence	14	0	.50	.21	.26
Method	14	0	.67	.26	.23
Panel B: Objectives	14	0	1	.40	.44
Panel C: Mandate	14	0	1	.34	.39
Identification	14	0	1	.39	.49
Evaluation	14	0	1	.36	.46
Management	14	0	1	.36	.46
Monitoring	14	0	1	.14	.36
Panel D: Integration	14	2	5	2.43	1.40
Panel E: Monitoring	14	0	.50	.11	.21

Table 3: Descriptive statistics internal control (per item)

	Frequency	Percentage		Frequency	Percentage
<b>Panel A: Attributes</b>			<b>(Panel C: Mandate)</b>		
► Conception			► Does internal control relate to the development of control processes?		
▷ Does there exist an internal control charter?	4	28.6	7	50.0	
▷ Does there exist internal control objectives?	5	35.7	▷ Does internal control relate to the existing information system?	7	50.0
▷ Does there exist clear norms with respect to the different aspects of internal control?	6	42.9	▷ Does internal control relate to data collection?	7	50.0
▷ Do these norms refer to internationally accepted norms (e.g. COSO)?	2	14.3	▷ Does internal control relate to data analysis?	5	35.7
			▷ Does internal control relate to data reporting?	4	28.6
► Method			Average Score (1-6)		
▷ Does internal control provide a reasonable assurance with respect to compliance with laws and regulations?	9	64.3	Std. Deviation		
▷ Does internal control provide a reasonable assurance with respect to the reliability of financial information?	8	57.1	<b>Panel D: Integration</b>		
▷ Does internal control provide a reasonable assurance with respect to the performance of operations?	6	42.9	▷ Is internal control applied within all activities and departments?	2.93	1.59
			▷ Does there exist a common internal control approach applicable to the whole organization?	2.21	1.63
			▷ Is internal control related to the objectives?	2.50	1.79
<b>Panel B: Objectives</b>			Are the different elements of internal control integrated with the day-to-day functioning of the organization?		
▷ Does internal control provide a reasonable assurance with respect to compliance with laws and regulations?	9	64.3	▷ Are the different elements of internal control integrated with the strategic and operational planning process?	2.36	1.87
▷ Does internal control provide a reasonable assurance with respect to the reliability of financial information?	8	57.1	▷ <b>Are the objectives and principles of internal control communicated throughout the organization?</b>	2.79	1.76
▷ Does internal control provide a reasonable assurance with respect to the performance of operations?	6	42.9		2.43	1.83
			Frequency Percentage		
<b>Panel C: Mandate</b>			<b>Panel E: Monitoring</b>		
▷ Does internal control relate to the analysis of the control environment?	4	28.6	▷ Does there exist an internal evaluation of internal control (e.g. internal audit function)?	5	35.7
▷ Does internal control include the identification and evaluation of risks?	8	57.1	▷ Does there exist an external evaluation of internal control (e.g. external audit)?	2	14.3
			▷ Does there exist an external evaluation of the risk management process?	0	0

Table 4: Average scores internal control (per dimension)

Dimension	N	Min	Max	Mean	Std. Deviation
Panel A: Attributes	14	0	1	.35	.35
Conception	14	0	1	.30	.36
Competence	14	0	1	.43	.43
Panel B: Objectives	14	0	1	.55	.45
Panel C: Mandate	14	0	1	.43	.36
Panel D: Integration	14	1	5.67	2.54	1.53
Panel E: Monitoring	14	0	1	.25	.38

### 5.1.1 Dimension 1: Attributes

In terms of *conception*, clear norms about the different aspects of internal control (42.9 percent) seem to be more widespread than norms pertaining to risk management (21.4 percent). It must be noted that only a small minority of SSPI refers to internationally-accepted norms, when defining their risk management and internal control norms (7.1 and 14.3 percent, respectively). Overall, the conception score (cf. Table 2 and 4) was relatively low, both for risk management (.20) and internal control (.30), which indicates that the basic attributes of risk management and internal control still are relatively poorly developed within the 14 SSPI, and quite different than internationally-accepted frameworks.

With respect to *competence*, it is more common for personnel within the 14 SSPI to receive training in internal control (57.1 percent) than risk management (35.7 percent). Moreover, in only 4 of 14 SSPI (28.6 percent), a system exists that allows personnel to share experiences and examples related to internal control. This figure drops to only 1 of 14 (7.1 percent) when considering risk management. These differences also are reflected by the overall competence scores: .43 for internal control compared to .21 for risk management. These results imply that, within the 14 SSPI, internal control competencies are more developed than risk management competencies.

Panel A in Table 1 shows that, in terms of risk management *method*, about one third of the SSPI (35.7 percent) performs risk management in a rather intuitive way, using qualitative evaluation methods, while just 2 of 14 SSPI (14.3 percent) use a formal means of risk management that relies on quantitative evaluation methods.

### 5.1.2 Dimension 2: Objectives

With respect to the *objectives of risk management* within the 14 SSPI, Panel B in Table 1 shows that, in 42.9 percent of the cases, risk management provides reasonable assurance with respect to the achievement of objectives. This percentage is relatively low, given that this refers to the basic purpose of ERM. In only 28.6 percent of cases, risk management seems to allow for the anticipation of new opportunities, which is, again, surprising given that both risks and opportunities are included in the ERM framework.

Panel B in Table 3 demonstrates that, in almost two thirds of the SSPI (64.3 percent), internal control provides reasonable assurance with respect to compliance with laws and regulations. This could be explained by the fact that, in the public sector, compliance is an important aspect of performance. A comparison between Panel B in Table 2 and Panel B in Table 4 illustrates that the objectives



of internal control have the highest average development score (.55), suggesting a relatively high level of development and alignment with international frameworks.

### 5.1.3 Dimension 3: Mandate

Regarding *risk identification*, Panel C in Table 1 shows that less than half of the ssPI identify internal risks (42.9 percent). With regards to external risks, this figure drops even further, to 35.7 percent. This could be because contractual performance agreements between the federal government and the ssPI largely focus on internal managerial performance.

Concerning *risk evaluation*, Panel C in Table 1 demonstrates that an equal number of ssPI evaluate the impact and the likelihood of potential risks (42.9 percent). Additionally, only 4 of 14 ssPI (28.6 percent) seem to evaluate risk tolerance and provide a risk hierarchy, two concepts that were introduced in the recent ERM framework.

It is remarkable to see that a permanent *risk monitoring* system exists for only 2 of 14 ssPI (14.3 percent).

Panel C in Table 3 shows the results with respect to the *internal control mandate*. In only 4 of 14 ssPI (28.6 percent), internal control relates to the analysis of the control environment. In more than half of the cases (57.1 percent), internal control includes the identification and evaluation of risks. It seems that internal control comprises risk management practices (e.g., risk identification and evaluation), instead of risk management comprising internal control practices, which is the philosophy of the recent ERM framework. In half of the cases, internal control relates to the development of control processes, as well as to the existing information system. Overall, the internal control mandate score (.43) was higher than the risk management mandate score (.34).

### 5.1.4 Dimension 4: Integration

It must be noted that, overall, for risk management and internal control, the integration scores (cf., Panel D in Tables 2 and 4) average less than 3 out of 6 (2.43 and 2.54, respectively), suggesting a relatively low level of integration of risk management and internal control within the overall organisational context.

According to Panel D in Table 1, risk management is not applied to all organisational objectives (average score: 2.71). More specifically, risk identification seems not to be related to these objectives (average score: 2.50). The different elements of risk management are integrated only to a limited extent within the strategic and operational planning process (average score 2.50) as well as within the day-to-day functioning of the organisation (average score: 2.43). These results can be linked to the fact that fewer than half of the responding SSP1 (42.9 percent) are convinced that risk management provides reasonable assurance with respect to the achievement of objectives (cf., above). Furthermore, it seems to be rather uncommon to have a risk management approach that is applicable to the whole organisation (average score 2.29), which can be linked to the observation that clear norms exist for only 21.4 percent of the cases, in terms of risk management (cf., above). Given these results, it is not surprising that the vision, objectives and principles of risk management are not communicated extensively throughout the organisation (average score 2.14).

Panel D in Table 3 shows similar results for internal control, though the integration elements of internal control seem to be a bit more developed than for risk management within the Belgian SSP1.

### 5.1.5 Dimension 5: Monitoring

Consistent with the lack of a permanent monitoring system, as discussed above, Panel E in Table 1 shows that an internal evaluation of the risk management process exists for only 3 of 14 SSP1 (21.4 percent). In none of the 14 SSP1 was there an external evaluation of the risk management process.

Panel E in Table 3 shows slightly different findings. Although these rates also remain low, internal control seems to be monitored to a greater extent than risk management, as reflected by a higher overall monitoring score (.25).

## 5.2 Multivariate Analysis

Table 5 shows that all five dimensions of risk management are highly and significantly correlated, which suggests a high degree of consistency in the implementation of the five dimensions. The three highest correlations are especially interesting. First, it turns out that the more risk management *objectives* are developed, the more the risk management *mandate* is developed ( $r = .808$ ;  $p < .01$ ), and the more risk management is *integrated* within the organisational context ( $r = .903$ ;  $p < .01$ ). Second, the more risk management *attributes* are developed, the more the risk management *mandate* (including identification, evaluation management and monitoring) is developed ( $r = .854$ ;  $p < .01$ ). These findings

suggest that clearly developed and recognized risk management objectives and attributes - such as a charter, clear norms, competent personnel, and risk management methods (intuitive or formal) - stimulate risk identification, evaluation, management and monitoring, as well as integrating risk management within an organisation. In other words, well-developed risk management attributes and objectives comprise a crucial starting point in the development of risk management practices.

In addition, Table 5 shows certain significant correlations between risk management and organisational size. More specifically, staff size (FTE) is positively and significantly correlated with the extent to which risk management is integrated within an organisation ( $r = .544$ ;  $p = .044$ ) as well as with monitoring ( $r = .585$ ;  $p = .028$ )<sup>(3)</sup>. In other words, the larger the SSPI, in terms of staff size, the more that risk management is integrated within the organisational context and the more that risk management is monitored.

Table 5: Correlation matrix risk management

	Staff Size	Attributes	Objectives	Mandate	Integration	Monitoring
Staff Size	1					
Attributes	.221	1				
Objectives	.442	.583 (2)	1			
Mandate	.262	.854 (2)	.808 (2)	1		
Integration	.544 (1)	.672 (2)	.903 (2)	.774 (2)	1	
Monitoring	.585 (1)	.599(2)	.738 (2)	.652 (2)	.651 (2)	1

(1)  $p < .05$

(2)  $p < .01$

Table 6 shows that, contrary to risk management, not all dimensions of internal control are significantly correlated. This suggests a lower degree of consistency in the development of the five dimensions of internal control. Again, the three highest correlations merit further analysis. First, the more developed the internal control *attributes*, the more developed the internal control *objectives* ( $r = .702$ ;  $p = .005$ ) and the more internal control is *integrated* within the organisational context ( $r = .778$ ;  $p = .001$ ). Second, the more developed the *internal control objectives*, the more internal control is *integrated* within the organisation ( $r = .780$ ;  $p = .001$ ). These findings suggest that well-developed internal control attributes and internal control objectives encourage the integration of internal control within an organisation.

Moreover, Table 6 shows a significant correlation between the integration of internal control within the organisation and staff size (FTE) ( $r = .559$ ;  $p = .038$ )<sup>(4)</sup>.

3 Note that no significant correlations were identified related to the other measures of size included in the questionnaire: operating budget and policy budget.

4 Note that no significant correlations were identified with respect to the other measures of size included in the questionnaire: operating budget and policy budget.

Thus, the larger the SSPi, in terms of staff size, the more that internal control is integrated within it.

Table 6: Correlation matrix internal control

	Staff Size	Attributes	Objectives	Mandate	Integration	Monitoring
Staff Size	1					
Attributes	.220	1				
Objectives	.219	.702 (2)	1			
Mandate	-.171	.683 (2)	.621 (1)	1		
Integration	.559 (1)	.778 (2)	.780 (2)	.573 (1)	1	
Monitoring	.486	.595 (1)	.437	.036	.491	1

(1)  $p < .05$

(2)  $p < .01$

## 6 Conclusions and Discussion

This study has investigated risk management and internal control practices within Belgian SSPI, and evaluated to what extent current practices are aligned with international frameworks (ERM and INTOSAI). The findings of this study and the recommendations that stem from them can be useful for public administrations that are willing to implement managerial and governance tools, like contractualisation policies.

First, the findings of this study demonstrate that risk management and internal control are not highly developed within Belgian SSPI, thereby confirming the two evaluation reports of the contractual performance agreements (Legrain, 2005). They also allow us to conclude that both risk management and internal control within Belgian SSPI are currently considered *ad hoc* projects, not integrated into the overall organisation, not linked with the achievement of organisational objectives, and only integrated to a limited extent into the strategic and operational planning process, as well as into the day-to-day functioning of the organisation. In other words, there still is a long way for Belgian SSPI to go to implement the philosophy of enterprise-wide risk management (including internal control). Moreover, it was found that the larger an SSPI is, in terms of number of staff, the more risk management and internal control are integrated within the organisation. It could be that small SSPI lack the people to dedicate to the implementation and integration of risk management and internal control. However, further research is needed to draw any conclusions regarding the impact of size and other organisational characteristics.

The findings of this study suggest that not all those who have implemented risk management understand how risk management can help them to achieve their objectives and anticipate new opportunities, even though these are basic concepts of ERM. This could be explained by the fact that current risk management norms, if they do exist, do not refer to internationally-accepted frameworks like ERM. On the other hand, it was shown that clearly developed and recognized risk management objectives stimulate risk identification, evaluation, management and monitoring, as well as the integration of risk management within an organisation. Current practices relating to the basic conception of risk management and internal control - such as a charter, clearly-defined objectives, and clear norms - remain poorly developed within Belgian SSPI and highly divergent from international frameworks. This finding confirms that a mutual understanding and shared meanings are crucial to launching effective risk management, as suggested by Smith and Toft (1998). Besides, the results of this study suggest that those Belgian SSPI that already have implemented risk management prefer to execute this in a rather informal way, to a high extent relying on common sense. Overall, the degree of development of the basic attributes of risk management and internal control is positively and significantly correlated with the development of other dimensions. In other words, a well-developed foundation is crucial to the implementation of risk management and internal control practices. With respect to the risk management mandate, risk

identification within Belgian SSPI is more focused on internal risks. In terms of risk evaluation, basic concepts like impact and likelihood are known. However, more 'advanced' aspects of risk evaluation – like risk tolerance and risk hierarchy – remain unknown or vague to practitioners within the SSPI. Also, most Belgian SSPI currently lack a permanent risk monitoring system. That most SSPI still consider risk management to be an *ad hoc* project could explain why they have not invested in continuously identifying new risks and re-evaluating existing risks. However, more efforts are needed in this regard to enhance the maturity of risk management.

Second, the results of this study indicate that internal control is more developed and monitored than risk management within Belgian SSPI. Moreover, internal control practices are more closely aligned with international frameworks, mainly with the elements of the basic COSO I framework (1992). Furthermore, the major objective of internal control within Belgian SSPI appears to be to ensure compliance with laws and regulations. This confirms that traditional internal control is strongly focused on conformance instead of performance which would be more in line with the expectations of the contractual performance agreements. In other words, the fact that the traditional internal control philosophy (strongly focusing on conformance) is more wide-spread than the more recent risk management philosophy (more focusing on performance) could be a reason why the performance requirements of the SSPI are not met (cf. Legrain, 2005). Although internal control seems to be more developed than risk management, respondents are not convinced that a common internal control approach exists that is applicable to the whole organisation, or that the objectives and principles of internal control should be communicated throughout the organisation. In other words, Belgian SSPI are still stuck in the traditional so-called 'silo' approach which is in contrast with the organisation-wide philosophy of ERM. This could again be due to a lack of mutual understanding and shared meanings (cf., Smith and Toft, 1998). Nevertheless, it has been shown that internal control competencies are more developed than risk management competencies (via training and a system that allows personnel to share experiences and examples), suggesting that SSPI still must invest in the development of basic competencies in risk management.

Third, our findings suggest that risk management concepts like risk identification and evaluation are part of internal control, rather than internal control being part of risk management, as recommended by the ERM framework. This could explain why risk management practices, as prescribed by the ERM framework, have been developed to such a limited extent within Belgian SSPI. Overall, internal control appears to be better known within Belgian SSPI and, consequently, can be considered a better basis on which to introduce risk management practices, instead of the other way around. Given this finding and the very young character of risk management within the Belgian public sector, one could wonder to what extent the SSPI are capable of implementing risk management in accordance with international frameworks like ERM. Smith and Toft (1998) argue that experts play a vital role during the implementation stage. As shown by previous research, internal auditors can play an important support-

ive role in the development and improvement of risk management and internal control (Sarens and De Beelde, 2006). Nevertheless, the development of internal audit functions within the Belgian public sector generally remains in its infancy (Van Gils et al., 2008). Other actors, like external auditors, also could stimulate the development of risk management and internal control. Moreover, we can wonder to what extent those SSPI that already are more advanced in risk management and internal control (the so-called 'pioneers') must play a mentorship role, **especially within the framework of the new wave of SSPI contractual performance agreements (2010-2012). Indeed, the new contractualisation policy recommends explicitly SSPI to reinforce their internal control, risk management and internal audit activities.**

We strongly believe that international standards in risk management and internal control, as stipulated by the ERM framework, cannot be applied literally within the SSPI context, or more generally, within public administrations. As mentioned earlier in this paper, INTOSAI clearly states that internal control systems within the public sector have their own specificities. Contrary to private organizations, public organizations also have an external mission. For example, the performance of an SSPI is not only judged according to costs/services ratios, but also according to the relevance and impact of the public policy on the problem(s) to be solved. This refers to the public sector's double functions in production, one internal and one external as mentioned earlier (Hood, 1991, 2006; Pollitt and Bouckaert, 2006). Consequently, it is necessary that risk management and internal control practices within the public sector take into account not only those events that affect the internal services of the public administration, but also the events that influence the public policy which the public administration must implement (Jacob and Shiffino, 2007). Currently, only the internal dimension is presented in the INTOSAI framework, although we would argue that both dimensions are needed to draft a comprehensive framework with which to guide the implementation of integrated risk management and internal control in the public sector. As Trosa (1999) argues: *"The problem is that one cannot choose between public policy and performance of the organization. Without performance, the quality and the quantity of the services to the citizens will drop. Without public policy, the performance is a mechanism which runs light and produces effectiveness without knowing the finalities."*

Based upon the findings of this study and given the arguments outlined in the previous paragraph, we believe that a more appropriate risk management and internal control framework is needed for the public sector, one which combines both a public policy and organizational dimension. This approach implies that risk management and internal control cannot only strive to improve the overall performance of the organisation; it also needs to take into account the relationships that exist between the various actors within the public policy cycle, and even between public administrations. Risk management also compensates for the tendency towards specialisation, via a coordinated process between actors. Consequently, risk management must start from a risk profile derived from a specific public policy, and strive to integrate the policy objectives, the related risks and the control activities necessary to manage these risks. This is impor-

tant, given that risks resulting from public policy exert an impact upon the performance of the public administration, and *vice versa*. In other words, risk management and internal control should be instruments of coordination for the actors taking part in the public policy cycle at both levels.

This study suffers from certain limitations. First, it used a self-assessment questionnaire that contained predefined questions to measure the status of risk management and internal control practices. By definition, the answers are subjective. We are convinced that the development of a more objective measurement instrument would be an important contribution to the literature. In order to develop these objective measures, in-depth case studies, enhancing our understanding of risk management and internal control practices in the public sector, would be useful. Second, although all Belgian SSP1 participated, the absolute number of respondents was rather small. This produces inherent limitations in terms of the interpretation and extrapolation of results. Third, given that we only focused on Belgium, international comparative research is highly recommended to draw any conclusions regarding the impact of the institutional context on risk management and internal control practices.



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