

INTOSAI



WGVBS

**SAIs Internal Risk Management and
Identification of High Risk Areas / Programs
in the Public Sector**

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I. Background

The Working Group on the Value and Benefits of Supreme Audit Institutions (WGVBs) of the International Organization of Supreme Audit Institutions (INTOSAI) has developed its working program around the contents of ISSAI 12.¹ In order to perform their functions and guarantee the potential value to citizens, Supreme Audit Institutions (SAIs) need to be seen as trustworthy. This is only achieved if they are perceived as credible, competent, independent and accountable institutions that lead by example. Hence, it is necessary to implement an effective risk² management process within SAIs, including integrity risks,³ with the aim of promoting the achievement of the organization's goals in an efficient, effective and economic manner.

Principle nine, in ISSAI 12, considers that, in order to ensure good governance in SAIs, among other items, they must regularly assess the organization's risks and complement this with risk management initiatives. Furthermore, its fifth principle highlights the value SAIs can provide by being aware of the shifting environment and identifying emerging risks faced in the public sector. Along this line, at the 8th meeting of the Working Group, held in Nanjing, China, it was decided to create a framework that could be helpful for SAIs to use in the identification of risks that governments face in their programs and operations.

SAIs should be able to pinpoint and manage their own risks in order to prevent any operational and strategic damage that could affect their performance, as well as to be in a better position to lead by example.

1 ISSAI 12 "The Value and Benefits of Supreme Audit Institutions – making a difference to the lives of citizens". Available for download at: <http://www.issai.org/issai-framework/2-prerequisites-for-the-functioning-of-sais.htm>.

2 According to the PMBOK® Guide – Sixth Edition (2017), a risk is "an uncertain event or condition, that if it occurs, has a positive or negative effect on a project objective." <https://www.pmi.org/pmbok-guide-standards/foundational/pmbok>.

3 INTOSAI counts with some tools to identify and manage risks. A concrete example of identification of integrity risks in public sector institutions is the Self-Assessment of Integrity (IntoSAINT). For further information on this particular initiative, please refer to www.intosaicbc.org/intosaint/.

Additionally, it is important for SAIs to have specific analysis methodologies that allow them to understand the structural problems that affect the public sector. As from the global examination of audit results, it is possible to know those management areas that are more vulnerable to present problems or failures that will affect the law enforcement, the efficient use of resources and the achievement of the public institutions' objectives.

In general terms, the adoption of this approach aims to provide useful information to positively influence the different stages that are part of the policy cycle through the identification of improvement areas regarding their design, implementation and evaluation. The main objective is to provide information that leads to the necessary legal and management reforms in the public administration to avoid the recurrence of inefficient practices and as a way to improve good governance.

This paper is divided into two main sections. The first one provides a brief guide on an internal risk management process that SAIs should perform in order to reach institutional goals and objectives, while the latter addresses the identification of high risk areas/programs in the public sector. In addition, this paper includes an appendix with SAIs' practical cases regarding the identification of public sector risks.



II. SAIs Internal Risk Management

a. Initial Conditions to carry out a Risk Assessment Process

- Support from the Top Management is vital when establishing the risk management framework and processes. Additionally, support from executive staff and a representative number of all officials —by levels and hierarchies— should be guaranteed and formalized through an institutional policy or statement.
- The SAI should consider providing training on risk management for its staff in charge of such process, as well as for other officials they may interact with, to ensure that they possess the knowledge needed. In addition, an awareness-raising campaign should be carried out among all the personnel of the SAI, with the purpose of involving them —from the beginning— in the process.
- Risk identification should be carried out by staff members with enough experience in the corresponding area in order to provide an effective detection of the threats and vulnerabilities in the institution, as well as the opportunities it seeks to undertake. The roles of the officials engaged in the risk assessment process must also be defined.
- A methodology, strategies and procedures must be defined. A monitoring system is required to identify potential events that could affect the proper execution of the organizational processes, as well as the achievement of institutional goals.
- Risk identification can be done, for instance, by conducting surveys and holding meetings and structured interviews with selected staff from different key areas.

- It is advisable to undertake workshops with all levels within the SAI departments to enhance the risks identification mechanisms.
- A report on the risk assessment should be prepared accordingly and presented to the Head of the SAI, ideally, in a work meeting that allows to explain the results obtained.

b. Risk Management General Process

This section presents a summary of the key steps included in the Risk Management General Process⁴.



i. Establishment of Strategic Goals and Institutional Processes

The SAI sets strategic goals to support the achievement of the institutional mandate, mission and vision. From these key goals, the operational, information and compliance goals are established. Specific objectives for the different organizational units are thereafter defined, which allows to identify the processes that each unit must perform. Such processes should be matched with the strategic goals and actions set forth in the Strategic Plan that, in turn, must be directly related to the annual work plan.

⁴ Based on COSO ERM 2017 and ISO 31000: 2018.

ii. Risk Identification

This step consists of identifying the threats and vulnerabilities, as well as the opportunities the SAI foresees that may affect the activities carried out in order to reach the general and specific goals. Internal and external factors that can trigger those risks (negative events) should also be identified. This process should be conducted as part of day-to-day activities; it should not be seen as an added task or administrative requirement.

Potential risks must be determined by collecting information from relevant management and staff, as well as from external stakeholders, who could be interviewed in order to make sure there are no 'blind spots' in the risk identification process (i.e. too much focus on internal risks).

iii. Risk classification

Since the tasks of SAIs have common features, the following risk categorization is proposed:

- **Strategic risks:** related to achieving the SAI's main objectives.
- **Administrative, legal and financial risks:** related to independence, mandate, tasks, responsibilities and financial resources (allocations) that help the SAI fulfill its functions. This includes human and material resources, and technologies of communication and information, among other elements.
- **Operational risks:** related to the SAI activity, mainly: audits or other control actions, including jurisdictional ones; related reports and decisions; provision of consultation to stakeholders; methodologies; techniques; procedures, and principles adopted by the SAI, as well as the level of technology it uses or needs to use, for instance, to protect the information security.
- **Ethics risks:** related to integrity, independence, objectivity, competence, professional behavior, confidentiality and transparency, which ultimately create credibility that enhances the prestige of the SAI.
- **External risks:** related to environmental, economic, social, and political impact.

iv. Risk evaluation

The risk evaluation consists of assessing the probability of occurrence and the impact of each risk. This evaluation is carried out using both qualitative techniques (assessing the likelihood from the perspective of expert judgment) and quantitative ones (using statistical models⁵).

5 Scientific literature in the field of risk management has shown that the risk perception and risk attitude of individuals can be important factors in the perception and evaluation of risks and, therefore, in the risk management process (i.e. whether they are paranoid, averse or tolerant towards risks or risk seeking). This cannot only play a role on the individual level, but also on the level of the organization as a whole. Experience shows that most institutions in the public sector tend to have a defensive attitude towards risks.

It is advisable to use a numerical rating scale (from 1 to 10) to evaluate risks, as well as an ordinal scale to establish the equivalent qualitative criteria (high, medium, low).

The likelihood (probability of occurrence) is evaluated based on the frequency (how many times the risk is likely to occur, considering internal and external factors), while the impact is assessed by taking into account the consequences that may result if the risk materializes. Such rating depends on each SAI's perspectives.

The following chart shows the scales suggested for risk assessment regarding likelihood and impact:

Assessment scale – Likelihood of materialization of risk

Value	Category	Likelihood
10	Recurrent	Very high. There is full assurance that the risk will materialize, it tends to be between 91% and 100%.
9		
8	Very likely	High. The risk has 75% to 90% probability of materialization.
7		
6	Likely	Medium. The risk has 51% to 74% probability of materialization.
5		
4	Unlikely	Low. The risk has 26% to 50% probability of materialization.
3		
2	Highly unlikely	Very low. The risk has 1% to 25% probability of materialization.
1		

Assessment scale – Impact of severity of risk

Value	Category	Impact
10	Very serious	Directly influences the attainment of the strategic goals, mission and vision of the institution. It may also involve financial loss or damage to SAI's prestige, or interrupting all of critical functions for a significant period, resulting in institutional failure in terms of provision of services.
9		
8	Serious	Significant damage to the institutional economic funds, the prestige or the achievement of some strategic objectives. A considerable period is also needed to restore operation or repair damage.
7		
6	Moderate	Causing a major loss to institutional funds or damage to its image.
5		
4	Low	Does not affect the attainment of strategic objectives, or may cause damage to property or image, which can be corrected quickly.
3		
2	Very low	It may have very low impact on the institution.
1		

v. Risk prioritization

After the assessment of risks by applying the aforementioned two rating scales, it is necessary to prioritize risks according to their final value and to determine which ones require immediate attention. To this end, it is useful to identify the priority area in which each risk is located.

Risk prioritization

Value	Category	Risk Area
10, 9	Serious	Significant risk area Steps are taken to mitigate risks located here, establishing a specific action plan to manage them.
8, 7	High	High risk area Determination is made regarding if the mitigation actions for risks located here will be shared or transferred to manage them properly.
6, 5, 4	Moderate	Moderate risk area Determination is made regarding if the prevention and monitoring actions for risks located here will be shared or transferred to mitigate them properly.
3, 2, 1	Low	Tolerable risk area Determination is made regarding if the risks located here will be accepted, prevented or mitigated.

The priority of risks is concentrated in a general risk map, in which risks are located to determine if attention is needed immediately.

vi. Evaluation of existing controls

Once the risks have been identified, classified, evaluated and prioritized, it is necessary to evaluate the existing controls, as well as their design and effectiveness.

Risks can be presented on a so-called 'heat' or 'risk map', which is a graphical depiction of the relationship between likelihood (on the horizontal axis) and impact (on the vertical axis) for each identified risk. These vulnerabilities should be mapped according to their residual risk (priority)⁶ level, which considers the extent to which they are already mitigated or reduced by internal controls.

vii. Risk response

Based on the risk priority, staff in each administrative unit should define the most appropriate response to address risks, for instance, the following ones:

- **Avoid the risk:** Eliminate the factors that are causing the risk. If a part of the process is at high risk, the entire process receives substantial changes for improvement, redesign or elimination, when applicable.
- **Reduce the risk:** The institution should establish actions to reduce the probability of occurrence (preventive actions) and the impact (contingency measures), such as specific measures for internal control and optimization procedures.

⁶ Depending on the case of each SAI, 'risk level' may be considered as 'relevance' or 'priority level'.

- **Transfer / Share the risk:** Transferring the risk to a third party who will assume the impacts or losses resulting from the materialization of risks present at the process. It can also be understood as partial transfers (sharing), in which the goal is not to separate the process completely, but to segment it and channel the segments into different administrative units or persons.
- **Assume / Accept the risk:** Establishing no action/control and assume the consequences if the risk materializes since mitigating proves to be unreasonable due to its low impact and low probability of occurrence.

The following measures could be useful to avoid and mitigate risks:

- Adopt a regulatory and administrative plan, which includes the establishment of authority and responsibilities within an organizational structure, as well as provide procedures that prevent violations of disciplinary systems by a clear segregation of conflicting tasks.
- Select competent staff through a proper recruitment process that depends on the competence and integrity of officers and assign the most experienced staff to the risky audits.
- Establish a financial and accounting system that relies upon a complete set of records, documents and a classified guide of accounts, where related standards are met.
- Adopt sound procedures to promptly record all accounting operations with fair value and have a consistent accounting classification in order to obtain reliable financial information through a practical accounting framework, which defines levels of responsibility.
- Evaluate and update periodically the internal control system to avoid outdated controls and to keep pace with new developments.
- Perform a retrospective analysis to identify former risks and their causes, as well as a prospective analysis in order to prevent future occurrences.
- Establish a comprehensive quality control and assurance systems.

viii. Reporting to the Head of the SAI

Once the risk assessment has been finalized, the main results should be communicated to the Head of the SAI, who, ideally, should be part of the overall process from the beginning of it. The report can include the following:

- **General Risk Inventory**

A list of all significant risks identified and assessed to which the SAI is exposed. The General Risk Inventory, or Risk Register, represents one of the main tools for risk management decision-making. It is therefore important to have a clear description of each risk presented. Causes and consequences should be separately identified, ideally in an order that reflects their importance. In addition, it is vital to regularly update the General Risk Inventory to follow up the evolution of risks.

- **General risk map**

Graphical representation of the assessment of each risk, according to their likelihood and impact, usually in the form of a heat map. The risks are presented so that the most significant ones (high impact and high likelihood) can be distinguished from the least significant.

- **Institutional program for risk monitoring**

A program of this kind can be developed and become part of the activities to be carried out to address all risks, with a special emphasis on the top risks. It should include administrative units responsible for implementation of controls and establish a timetable with specific actions and deadlines in order to identify the institutional outcomes and performance on the fulfillment of action plans for mitigating the risks.

An additional activity that could be done is the execution of institutional workshops based on the risk inventory and map in order to assess the compliance gaps and address areas of opportunity.



III. Identification of High Risk Areas / Programs in the Public Sector

The traditional approach to auditing is based upon a bilateral relationship between the auditee and the auditing institution. The cumulative results of the work performed on audited entities can offer a general view of patterns or iterate situations, which might, in turn, shed light on structural problems in specific areas / programs of the government.

SAIs have a unique position within the public structure, as to better understand the challenges and vulnerabilities that public entities face. In addition, as it has been discussed within the WGVBS, SAIs remain as some of the most trustworthy public institutions due to their oversight role and independent nature, as well as for providing evidence based on audit findings.

Any government deals with endanger procedures and activities that compromises the fulfillment of public goals, the efficient use of public funds and the compliance of rules and laws. Specifically, there are certain areas/programs within the government structure that may be riskier than others, given the nature or the conditions of the actions carried out.

For instance, public procurement entails vulnerabilities —opportunities to commit fraud, abuse or corruption practices— because of the diverse interaction between public officials and private agents, including the hidden and irregular practices that lead to collusion, as well as the high amount of resources that are usually allocated in the public budgets under this item. In this case, if different audit reports on this matter show a reiteration of similar irregularities / problems that imply a legal breach of rules or a failure to attain objectives, SAIs may consider this area as a high-risk one.

Likewise, public programs that involve direct impact on social welfare or national security might be regarded as high-risk due to its political, social and economic relevance.

Finally, there are other areas/programs that are executed under no optimal conditions, in terms of institutional skills, availability of resources or unsuitable internal control environment. These themes may also be labeled as high-risk.

In this context, SAIs can provide different stakeholders with added value by detecting specific vulnerabilities that entities should address. It is worth mentioning that the identification of high-risk areas/programs contributes to deterring mismanagement, ineffectiveness and irregularities.

a. Defining Public Sector Risk Areas

For the sake of this framework, a high-risk area in government might be defined as:

- A program or agency that is at risk of failure to fulfill its mandate or is subject to fraud, waste, abuse or mismanagement;
- A common pattern or process in the functioning of government that does not adequately consider efficiency, effectiveness, economy, and legal compliance, and
- Negative trends in domestic economic, social, cultural, political and environmental variables.

These risks might be explained by different factors:

- Structural vulnerabilities in the public institutions' operation:
 - Inappropriate internal control systems, including integrity.
 - Public management models that do not meet citizens' needs.⁷
 - Deficiencies in technical skills and capacities.
 - Financial constraints.
 - Technological gaps.
 - Management and human resources concerns.
 - Outdated processes and procedures.
 - Reliability of data.
- Inappropriate design and enforcement of laws and regulations:
 - Laws not pertinent to current social, economic, and political conditions.
 - Civil servants' perception of impunity resulting in perverse incentives.
 - Deficient justice enforcement.
 - Lack of checks and balances in governmental affairs.
 - Government's deficient performance evaluation.
 - Deficiencies in the statutory frameworks of the government.

⁷ One of the vulnerability factors in public entities lays on the non-implementation of models designed to meet citizens' needs. For example, process management: A management at the service of citizens should necessarily change the traditional model of a functioning organization and move towards an organization process management included in the "value chain" of the entity. This will guarantee public goods and services under their responsibilities generate positive results and impacts for the citizens.

- External conditions stemming from the international environment:
 - Slowdown of global economy.
 - Regulatory changes affecting trade partners.
 - Widely fluctuating and unpredictable international markets and interest rates.

- Economic, social, cultural and environmental patterns:
 - Disturbance of public order in country regions.
 - Undue political influence on government.
 - Lack of trust in the public sector.
 - Overly bureaucratic culture.
 - Lack of institutional mechanisms allowing social participation in public issues and equal treatment under the law.
 - Deficiencies in public security, health, energy, communication, education, and so on.

According to some frameworks⁸ to manage risks in the public sector, there are three thematic zones that present the highest risks in terms of impact on regularity and probity. These areas are the following:

i. Government procurement

Government departments and public enterprises are increasingly turning to the private sector to procure a wide range of goods, services and works of public interest. Government contracts represent a fundamental economic activity, which generate significant financial flows.

Partly, as a result of their size and their complexity, government contracts are one of the public activities most exposed to risks to regularity and probity, particularly corruption. Procurement is a major risk area, which could include anti-competitive practices that cause the government to pay artificially high prices for goods and services.

Besides government contracts, the following items might also be subject to specific attention:

- delegation of government services (delivery of a government service, concessions and infrastructure management,
- Contracts for public-private partnerships, and
- Government long-term leases.

The audit of the regularity of these transactions involves the verification of the conclusion terms of these contracts or partnerships. Their execution terms are also important since they may enable irregularities, such as the order of additional operations or even works not carried out or modified.

⁸ *The Identification, Audit Scheduling and Handling of Risk in the Public Sector*, Paris, Cour des Comptes, 2016, pp. 4-6.

ii. The grant of government aid

Government aid schemes are levers for the implementation of a policy by the private sector. The field of government aid schemes is characterized by its extent:

- Diversity of the donors, whether they are public figures (state, territorial governments, government establishments, public interest groups, community and international entities) or private bodies linked to a government office;
- Proliferation of intervention methods: diversity of financial aid (subsidies, bonuses, taking of equity stakes, loans, guarantees, tax credits, tax rebates, reductions in social security contributions, etc.) and crosscutting programs.

Besides reinforcing the controls on the use of government funds, the threats in this area of risk are the lack of transparency in the grant and management of the aid, as well as the poor use of the funds or their misappropriation.

Indeed, the examination of regularity provides the verification of the conditions for the use of these government funds, particularly the conformity of their allocation and the consistency of the expenditure transactions, including the certification of the service provided.

Drafting a multi-year schedule is advisable to allow the identification of priorities and targeting per type of beneficiary body, activity or geographical sector.

iii. The management of human resources

Besides personnel expenses, this area of risk includes social security contributions, as well as services and miscellaneous allocations. The following points should be prioritized:

- Conditions for recruitment (creation of position and procedure) and the service provided;
- Conditions for the setting of the highest remunerations, including salaries, bonuses and allowances, particularly the corporate officer managers and all their incidental benefits (reimbursement of miscellaneous expenses, related benefits);
- Conditions for aggregation of remunerations;
- Audit of payments of social security contributions;
- Organizational climate, and
- Prospects of permanence⁹ and growth of human capital.

9 The time period that each staff member decides to stay at the institution.

b. Identification of risk areas stemming from audit work

SAIs can use different methodologies in order to identify risk areas in their own national public sectors; these approaches might be focused on one or more of the following activities:

- Analyzing audit results so as to define recurrent patterns, unaddressed problems and continuous trends:¹⁰
 - Quantitative analysis based on statistics of audit findings across different years, and
 - Qualitative analysis of audit findings, including the identification of explanatory factors contributing to areas of risk.
- Compiling relevant information from external sources:
 - Detection of social and economic indicators and trends,
 - Identification of potential impacts on public finances from internal and external factors,
 - Definition of stakeholders and public opinion priorities and demands, and
 - Detection of all related news, information, interviews, etc., which are published in the media.
- Conducting surveys or focus groups among relevant stakeholders:
 - Members of parliament,
 - Non-governmental organizations,
 - Media,
 - Academia
 - Audited entities,
 - Other government departments,
 - Society at large, and
 - Donors.

Each SAI, depending on its available resources, technical capacities, and/or legal mandate, might use one or more of these options. The expected product of this process would be an identification and mapping of risk areas across government. This information could be submitted to relevant stakeholders since it could prove to be an important input for legislative work, public budgeting, program and policy assessments, audit planning, prioritization of governmental actions and academic research and studies.



¹⁰ It is advisable to carry out this analysis periodically, at least once a year.

Appendix - WGVBS Member SAIs' Practical Cases

a. Austria

The SAI of Austria aims to respond to public sector risks by planning its audits in a risk-oriented manner. An examination of the audited entities internal control systems (whose effectiveness and reliability are assessed in each audit) and risk management systems often provides for indications with regard to the focal theme of the audit. Experience has shown that the following areas and audit themes come with a high risk: projects with a high number of participants, separation between implementation and funding, restructuring processes in the IT area, outsourcing, measures with inadequate high-pressure deadlines etc. In order to reinforce its impact, the SAI of Austria conducts follow-up audits. Sample audits (in particular at smaller entities) serve to increase its preventive impact.

b. Bahrain

In 2017, the SAI of Bahrain conducted a major review to its audit methodology based on related ISSAI's. Such review resulted in the development of a new Risk-based Audit framework in the following aspects:

- Risk assessment forms. - two new forms were initiated for assessing risks.
 - The first one includes overall risks inherited in the business and environment of the auditee, raised from the Top Management prospective and policies (governance), culture in the auditee, budget availability, plus any other internal or external factors. Aligned with each risk listed and described in the form, positive and negative factors affecting on this risk are stated in as much detail as possible, plus the risk level (high, medium, or low) and any special audit procedure needed to mitigate it. This form can be filled through questionnaires, walkthrough, auditee internal reports, previous experience with the client, etc.
 - The other form is used to assess risks more specifically to the auditee's operational processes and procedures, where risks are identified mostly from previous audit findings, internal audit reports, follow-up results for last external audit reports, etc. This form includes description and effects of the risk and its level (high, medium, or low), kind of risk (operational, compliance, internal control, or abuse and fraud), the responsible party, internal control procedures and activities available in the client to reduce the risk and in what form (preventive, detective, or corrective), plus any special audit procedure needed to mitigate the risk.
- Multi-Materialities. - materiality is calculated in the audit plan (overall materiality on expenditures or revenues chapters' level, tolerable misstatement, and summary of audit differences) for every financial assertion factoring the level of risk expected (likelihood multiplied by effect).

c. France

- Risk management has substantially increased since 2000 in the French public sector within strategic, operational and support fields. In parallel, the French SAI —*le Cour des Comptes*— and its associated Regional Chambers of Accounts have consistently developed their approach to audit risk management in public institutions and processes.
- Depending on their experience, auditors can investigate and issue observations and recommendations, more or less focused when dealing with the strategic and operational fields, mainly on the existence, implementation and efficiency of risk control processes within the auditees.
- Regarding support functions, including financial, IT and human resources systems, directly linked with the use of public resources, the French SAI draws on its high level of expertise to also challenge the risk mapping in itself, the adequacy of mitigation plans and actions, as well as the effectiveness of internal control systems. Furthermore, its jurisdictional mandate and its cooperation with judicial powers enable it to identify serious violations in the implementation of administrative and financial regulations and to allow appropriate sanctions, in order to improve risk management, especially in procurement, granting of public subsidies, recruitment, promotion and salaries of civil servants.
- Financial risks are in the core of audit stakes in France. The risk management system is highly developed in the public financial field, particularly in budget and accounting sectors. Through the mission to certificate the State and Social Security's accounts, the French SAI evaluates the risk management system of the government administration and private welfare institutions.
- According to Article 47-2 of the Constitution and several laws (2001 for State accounts and 2005 for Social Security), public accounts must be regular, objective and faithful on the image of their financial situation. These provisions have strengthened the requirements for accounting reliability and financial transparency. They were declined by the decree of November 7th, 2012, in relation to Public Accounting and Budgeting Management (GBCP for *Gestion Budgétaire et Comptable Publique*), which defines the accounting rules applicable to public management.
- The objective of accounting quality is guaranteed in particular by the application of accounting standards by the State and its public bodies.
- To ensure compliance with the criteria of quality of accounting,¹¹ the GBCP decree also provides the establishment of an internal control system in each ministry and body.¹² Accounting internal control refers to all the formalized and permanent arrangements designed to provide reasonable assurance of controlling the risks threatening the quality objectives of public accounts, from operative events to its settlement accounting. As such, it is an essential component of the overall

11 Reality, justification, presentation and good information, sincerity, accuracy, completeness, non-compensation, imputation, attached to the correct period, attached to the correct exercise.

12 The State is in line with the European Directive 2011/85 of 8 November 2011, which states that must set up reliable systems of public accounting in established rights, subject to internal control and independent audit.

risk management and a powerful lever for improving the reliability of accounts. The decree of December 31st, 2013, describes the actors and the internal accounting control approach. It is implemented, within each ministerial department, by managers at all levels, under the coordination of the secretary general of the ministry.

- The risk management in accounting is based on a trend of continuous improvement in three stages:
 - identification of accounting risks and development of action plans;
 - implementation of measures to strengthen the system, consolidating the three levers of accounting control organization (organization of the accounting function, documentation of procedures and risks, traceability of actors and operations), and
 - evaluation of the effectiveness of the accounting internal control system.
- The reference framework for the internal budgetary and accounting controls of public bodies, published by decree on December 17th, 2015, is also based on this progressive and adapted approach to the challenges. Common to all public bodies, it defines the objectives and how to implement the risk management approach, while leaving margins for necessary adaptations.
- The SAI of France publicly reports every year on the progress of risk management and control in its reports on State Budget and Accounts on Social Security Management and Accounts.

d. Iraq

The SAI of Iraq uses two kinds of evidence to identify public sector risks. They are as follows:

- Institutional Risks Assessment and Analysis Manual: It includes a set of general guidelines that audit teams use to perform their audit tasks. The manual has the following themes:
 - Administrative organization risk assessment.
 - Technical organization and activity risk assessment.
 - Accounting and financial organization risk assessment.
 - Procurement and contracting risk assessment.

This manual aims at analyzing and assessing institutional risks to remedy them and fight corruption in the financial, technical and administrative organization of all managements and institutions by means of its general steps. These steps aim at detecting corruption and fraud, securing resource protection from waste, loss and misuse; leading to improvement of operation efficiency, adherence of staff to laws, rules, regulations and management policy.

- Risk-Based Audit Manual: According to this manual, audit priorities are arranged in audit office plans or during activity and operation audit. The aim is to focus on high risks in institutions so as to be well covered and ultimately leading to tasks distribution among team members and linking internal audit to risks and assessing them.

The following are some points that an auditor should consider while auditing to identify risks:

- Changes in sectors (there might be potential work risks like staff of the entity lacks the ability to deal with changes taken place in the sector).
- New services and products (there might be potential work risks like obligations are greater than products).
- Expanding of work (there might be potential work risks like demand is inaccurately estimated).
- New accounting requirements (there might be potential work risks such as incomplete or improper implementation or excess costs).
- Organizational requirements (there might be potential work risks, such as legal risks).
- Current and expected funding requirements (there might be potential work risks such as losing funding due to the entity's inability to meet the requirements)
- IT utilization (there might be potential work risks, such as inconsistency of systems and operations).

The SAI of Iraq audit work is based on what has been mentioned above. The auditor follows the steps while performing his/her tasks. Once the audit is completed, a report of results of the observations and weak points in the public institutions is prepared. The results are reported to the parties concerned.

The SAI of Iraq identifies public sector risks and reports them to the parties concerned via its annual report that is submitted to the Legislature. It includes a summary of fiscal year audit results namely through common observation diagnosed in public institutions. The aim behind which is to pinpoint the potential negative impact on the public budget, public accountability system, integrity and quality management in order to take the appropriate corrective procedures and avoid their recurring.

e. Kuwait

The SAI of Kuwait has taken auditing to a higher level by using a risk-based audit method, which consists of prioritizing audit and focusing on strategic objectives, activities and processes that involve high risks. This method aims to add value to the audited entities by identifying risks and improving methods to address them. It also guides the efforts of the audit team members to ensure the enhancement of the control work outputs, and ensure the quality of performance. This method, rather than traditional audit ones, is based on auditing accounting aspects and the extent to which entities are subject to laws, policies and procedures auditing.

The SAI has created a working group to set the fundamental principles of risk-based auditing, and the group has prepared an initial draft of the *Risk-Based Audit Guidance Manual*, aiming to get the final approval and start to be applicable.

However, the SAI of Kuwait actually applies its auditing work based on the most important risks due to the fact that most of the foundations for auditing are certain risks raised by the Parliament or the Council of Ministers, and the task of the SAI is to examine these risks and audit them.

The SAI of Kuwait issued its first *High-Risk Report* in July 2018, which aimed to highlight the high-priority topics for the Parliament to adopt and discuss. This report was also sent to the Council of Ministers in order for it to consider the reasons why it was classified as a high-risk issue, according to the following criteria:

- Mismanagement.
- Misuse of available resources.
- Corruption or fraud.
- Waste in public money.

The SAI of Kuwait follows up and updates, periodically, topics considered as high-risk, adds new ones and deletes those causes that have been classified as high-risk subjects according to four basic criteria:

- the extent to which senior management and leaders are committed to the control responsibilities in taking appropriate corrective actions and their support for these procedures.
- the adequacy of human capacities and competencies, as well as the available financial resources to address these risks.
- the availability of a corrective action plan that can identify the root causes of those risks and the measures to overcome them.
- monitoring and follow-up periodically the progress made in the implementation of corrective measures to cope with high risks.

f. Mexico

The Mexican SAI has recently adopted a risk-based approach. The objectives of this approach are the following: (1) ensuring that audit information contributes to outlining a strategic perspective on public sector management weaknesses, (2) becoming a means of preventing audit findings on the same issue from recurring, and (3) making the value and benefits of the Mexican SAI's work more evident.

This approach is based on the assumption that the public sector faces a wide range of potential problems with significant impact on the national budget and quality management. There are certain areas that are more likely to be subject to these risks; in these cases, one can observe vulnerabilities that: (1) are currently affecting management operation and policy implementation, or (2) are not yet having any current effect, but in the future there is a high likelihood that they will have a negative impact either on the functioning of an entity or the achievement of program goals.

The risk areas that are selected as the main ones by the Mexican SAI have an impact on public sector governance, including: irregular or inefficient use of public funds, management failures (poor performance and unachieved goals), and distrust in the government.

The Mexican SAI's methodology is based on a qualitative and quantitative analysis of the individual auditing results obtained during a specific year. The auditing staff identifies the vulnerabilities related to the nature of the findings included in each audit report. The list of the identified vulnerabilities is compiled and sorted. Based on this list, there is an analysis of their frequency and main features in order to categorize the data. This categorization is aimed to identify the key risk areas.

Following these steps, the first Mexican SAI annual auditing reports identified the following eleven key areas:

- Information on social programs beneficiaries: inadequate design and operation of databases that gather information about people enrolled in social programs. The lack of comprehensive and updated registry systems results in an inappropriate identification of target groups, inability to verify data accuracy, difficult policy assessments, and miscommunication of programs' goals and outcomes, which ultimately hampers the program implementation process.
- Disclosure of expenses and liabilities: inappropriate and incomplete information on the financial status of public institutions hinders the national planning process, preventing a proper assessment of budget constraints, medium and long-term payment obligations, and the real financial impact of debts and contingent liabilities.
- Effective integration of citizens in overseeing public programs: constraints over the real participation of social program beneficiaries contributes to an inadequate regulatory framework, high levels of social marginalization, inappropriate involvement of intermediaries, resistance to the authorities, and information asymmetries, among other conditions.
- Procurement practices by public agencies: the current legal framework prescribes the requirements and procedures to be met for government purchases. However, in some cases, although such regulations are complied with, the resulting contracts do not represent a real benefit for the state.
- Public works planning and oversight: the allocation of public contracts must be carried out so as to preserve the best conditions in procurement. However, there are still problems like improper planning, inadequate work plan execution, poor project management and supervision, insufficient skilled staff, delays and cost overruns.
- Intermediaries in the public spending process: the federal structure contemplates that part of the budget for certain areas such as health, education, agricultural activities, or economic development is exercised through intermediaries, including local agencies, universities, private organizations and civil society. This can result in significant risks and a limited accountability.
- Unexpended budgetary resources: having unexpended funds remaining, or positive financial balances, corresponding to a particular activity, program, or public service. The unexpended budget does not represent savings; rather, it involves an inability to spend efficiently.
- Inadequate use of IT: the implementation of IT innovations does not necessarily result in a benefit. In some cases, the use of IT systems does not have a positive impact on improving management processes, instead resulting in costly and underutilized investments.
- Overlapping programs: using different approaches for solving public problems, without effective communication and coordination between the agencies involved, resulting in overlapping efforts and inefficient use of resources.

- Public services provided by private sector: the participation of private firms, as suppliers of public services, has not allowed neither a more efficient management alternative, nor better supervision and control.
- Failures in the design and implementation of public policies: This includes an inadequate identification of policy goals and expected outcomes, and poor performance of agencies responsible for processes and implementation activities.

g. Peru

In the Peruvian case, to elaborate policies on which the audit plans are based, they consider: administrative systems with higher risks, sectors with a greater impact on the priorities on government policies and the legal assignments prioritized by the National Control System, such as:

- Income and revenue.
- Procurement of good and services.
- Investment projects or public works.
- Authorizations, licenses and permits.
- Social programs and basic social services.
- Extractive industries: fishing, forest, mining and fossil fuels.
- Natural disasters and phenomenon.
- Environmental management.
- Election campaigns and management transfers.

Regarding compliance audit, it has been considered a directive and a manual which set out the guidelines for the audit to be based on the risks detected during the evaluation process of the design, implementation and effectiveness of internal control of the subject to be assessed. This was carrying out through the walk test and the result had two purposes:

- Present deficiencies of internal control as part of the audit report for the adoption of measures to overcome such deficiencies.
- Strengthening professional judgment of the auditor to decide the trust level of the process and sub processes controls and, based on that, define the procedures of the final audit plan to assess the subject to be audited.

Auditors identify critical or fundamental process or sub process in the subject to be audited and the main activities of each one of these. They will also identify the inherent risk for each activity and the control every entity has to reduce it.

The inherent risk is the combination of internal and external risk factors in their natural state, without the application of any control. This is identified taking into account the following factors:

- Nature and sector of the entity.
- Nature, complexity and volume of operations performed.
- Organizational structure and level reached in process management.

- Managerial organization, human and material resources, management integrity and resources quality of the entity.
- Financial situation of the entity.
- Results of previous audits conducted to the entity.

i. Identification of corruption risks in procurement Process and management of works by contract.

Given the fact that government acquisitions and procurement are one of the most representative aspects in the public budget execution, where irregularities are frequently found, causing significant loss to the national treasury, it is the SAI of Peru responsibility, according to its attributions, to define and improve control mechanisms. This way, they will contribute to the oversight of state-owned property. This is why there is the *Audit Guide for Government Acquisitions and Procurement* and the *Audit Guide for Public Works*, which have a methodology oriented to standardize audits procedures in the performance of audits to public works. These are specialized audit guides which, under a process and sub process approach, identified risks, factors, descriptions and the effects they may cause in the achievement of the objectives of public entities.

In the case of the *Audit Guide for Acquisitions and Procurement*, risks were identified for the following phases:

- Planning and preparatory activities;
- Selection process, and
- Contractual execution.

Sub processes of public works management where risks were identified are also procurement phases:

- Need for hiring;
- Organization of procurements;
- Bases and call;
- Proposal evaluation and granting;
- Signing of the contract, and
- Execution of the contract.

In the *Audit Guide for Public Works*, for every sub process of the procurement, there is a description of statements and management criteria, from the perspective of efficacy, efficiency and economy, and depending on this, specific procedures are developed by the auditor.

h. Turkey

Ensuring the increased use of IT while conducting audits has become more important for the SAI of Turkey in recent years due to the growing quantities of data, which become more complex to process over the years. By developing computerized audit systems and searching ways to extend their use, the SAI of Turkey aimed to: lessen the resources used and decrease workload, apply Big Data analysis, identify mistakes in data processing in an earlier stage, and enable the automation of analysis and continuous monitoring.

Development of analysis scenarios for a data analysis system. - In the Turkish SAI, a centralized data processing function was developed, through which the management identifies the risks earlier, before the annual audit programming / planning process and the audit strategy establishment takes place. With the creation of predefined analysis scenarios, the data is reviewed on a regular basis with respect to the predetermined parameters to bring automation and standardization to the audits. Scenarios are sets of data analyses designed for specific purposes by a specialized team. Scenarios are designed to validate a wide range of data sets and to detect accounting errors and other irregularities. Currently, some of these analyses are conducted on payroll data of government officials, and some of them are on accounting records of auditees.

The Turkish SAI execute analysis scenarios on the data of all the auditees by using *VERA*; a data analysis and management system/software. As result of this process, risky transactions are detected, then, these risky ones are shared with the Top Management and the auditors. The Turkish SAI uses these results for macro planning auditing, while the auditors use that information during the planning and execution phases. Additionally, the SAI has specific controls on integrity and compliance to verify the data warehouse security.

The results of scenarios analysis provide the auditors with reliable information to some extent and, if necessary, further investigation is performed by the auditors. In addition to the analyses conducted by the data analysis team, auditors can run further customized analyses on auditees' data over *VERA* and get their results instantly.

i. U.S. GAO

The Government Accountability Office (GAO) has developed a robust analytical framework to focus attention on government operations that it identifies as high risk¹³ due to their greater vulnerabilities to fraud, waste, abuse, and mismanagement or the need for transformation to address economy, efficiency, or effectiveness challenges. The main product of this approach is a report listing high risk programs and operations in key public sector areas. This report is updated every two years and is presented to the Congress at the beginning of each new session.

The high risk program began in 1990, and since then it has undergone several changes in order to capture the complexity of government activities. The original High Risk List had fourteen programs, while the current one includes more than thirty. The major cross-cutting high risk areas range from transforming Department of Defense business operations and managing federal contracting more effectively, to assessing the efficiency and effectiveness of tax law administration and modernizing and safeguarding insurance and benefit programs.

To determine which federal government programs and functions should be designated high risk, GAO uses its guidance document, "Determining Performance and Accountability Challenges and High Risks." GAO considers quantitative factors such as the exposure to loss, as well as several qualitative factors, such as whether the risk involves public health or safety, national security, or could result in significantly impaired service, program failure, or greatly reduced economy, efficiency or effectiveness. GAO also considers corrective measures planned or underway to address risks and the status and effectiveness of these actions.

13 GAO, Report to Congressional Committees. High-Risk Series, An Update, (US: GAO, February 2015). Available at: <http://www.gao.gov/assets/670/668415.pdf>

Based on this information, GAO identifies areas of vulnerability in order to alert stakeholders and public opinion about the need to target long-term improvements.

Another important aspect of this approach is the follow-up activities it involves. After an area is added to the High-Risk List, GAO assesses the corrective actions and policies taken by the Congress or the Executive Branch to curb the risk areas' negative effects and updates the status in its next biennial update report. GAO uses the following five criteria for establishing when an area is ready to be removed from the High Risk List:

- **Leadership Commitment:** agency has demonstrated strong commitment and top leadership support.
- **Capacity:** agency has the capacity (i.e., people and resources) to resolve the risk(s).
- **Action Plan:** a corrective action plan exists that defines the root cause and solutions, and provides for substantially completing corrective measures, including steps necessary to implement the solutions GAO recommends.
- **Monitoring:** a program has been instituted to monitor and independently validate the effectiveness and sustainability of corrective measures.
- **Demonstrated Progress:** agency has been able to demonstrate progress in implementing corrective measures and in resolving the high risk area.¹⁴

Based on these five criteria, GAO rates the level of improvement in each area, including the corrective actions and other initiatives undertaken. These improvement ratings are especially useful for agency leaders and the Congress in setting their priorities for addressing high risk areas.



¹⁴ GAO, Report to Congressional Committees. High-Risk Series, An Update, (US: GAO, February 2015). Available at: <http://www.gao.gov/assets/670/668415.pdf>

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WVG BBS

Annex-II

Quality Assurance Certificate of the Chair of the Working Group on Value and Benefits of SAIs (WGVBS)

This is to certify that the *Paper on SAIs Internal Risk Management and Identification of High Risk Areas / Programs in the Public Sector*, which is placed at level 2 of Quality Assurance as defined in the paper on “Quality Assurance on Public goods developed outside Due Process” approved by the INTOSAI Governing Board in November 2017, has been developed by following the Quality Assurance processes as detailed below:

- (i) The first version of the paper was drafted into two parts by a Task Team within the WGVBS. The first part was focused on SAI’s internal risks, while the second part was about public sector risks.*
- (ii) Both documents were submitted to the WGVBS members for comments during a 15-day period.*
- (iii) The Task Team updated both papers taking into account the comments provided by the WGVBS members and merged them into a single document.*
- (iv) The single integrated version of the document was submitted to the WGVBS members for feedback during a 15-day period.*
- (v) The Task Team updated the paper taking into account the comments provided by the WGVBS members.*
- (vi) The WGVBS Chair submitted the document to the Community of SAIs and to relevant stakeholders for comments during a 90-day period.*
- (vii) The WGVBS Chair updated the paper taking into account the comments provides by the Community of SAIs and relevant stakeholders in order to reach a final version.*

The product developed is consistent with relevant INTOSAI Principles and Standards. The structure of the product is in line with the drafting convention of non-IFPP documents.

The product is valid until **September 27th 2025**, and if it is not reviewed and updated by **September 28th 2025**, it will cease to be a public good of INTOSAI developed outside the Due Process.


Mr. David Rogelio Colmenares-Páramo
Chair of the Working Group on Value and Benefits of SAIs



INTOSAI

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Collaboration
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**Quality Assurance Certificate of the
Chair of INTOSAI Knowledge Sharing and Knowledge Services**

Based on the assurance provided by the Chair of INTOSAI **Working Group on Value and Benefits of SAIs (WGVBS)** and the assessment by the Goal Chair, it is certified that the ***Paper on SAIs Internal Risk Management and Identification of High Risk Areas / Programs in the Public Sector***, which is placed at **level 2 (two)** of Quality Assurance as defined in the paper on “Quality Assurance on Public Goods developed outside Due Process” approved by INTOSAI Governing Board in November 2017, has been developed by following the Quality Assurance processes as detailed in the Quality Assurance Certificate given by the Working Group Chair.

The product is valid until **September 27th 2025**, and if it is not reviewed and updated by **September 28th 2025**, it will cease to be a public good of INTOSAI developed outside the Due Process.

Rajiv Mehrishi
Chair of INTOSAI Knowledge Sharing and
Knowledge Services Committee