APPLICATION OF THE THREE LINES OF DEFENSE MODEL IN INTERNAL AUDIT IN BIH

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Abstract

The Three Lines of Defense Model represents one of the most important contemporary frameworks for risk management, internal controls and corporate governance. Developed by the Institute of Internal Auditors (IIA), the model was first formalized in 2013 and then significantly improved in 2020 to respond to the growing complexity of the business environment and the need for an integrated approach to value management (IIA, 2020).

The fundamental purpose of the model is to clearly define responsibilities and relationships between key functions within an organization. The model distinguishes three basic lines: the first line (operational management), the second line (supervision and support functions) and the third line (internal audit). Each of these lines has a specific role, but their effectiveness depends on mutual cooperation, communication and coordination. The first line is responsible for risk management and the implementation of controls in everyday business operations. The second line supports, monitors and oversees the effectiveness of controls, while the third line – internal audit – provides independent and objective assurance on the functioning of the entire system. The updated 2020 model emphasizes the transition from a "defensive" approach to the concept of creating and preserving value.

In conclusion, the three lines of defense model represents an integrated framework that connects management, control and audit into a single system. Its value lies in its clear accountability structure, but also in its ability to adapt to different organizational and institutional contexts.

1. INTRODUCTION

In the modern business environment characterized by globalization, digitalization and increased regulatory requirements, organizations are faced with a growing need for effective risk management and controls. Traditional approaches to supervision and control are no longer sufficient to deal with the complex challenges arising from dynamic market conditions and increasing stakeholder expectations. In this context, the Three Lines of Defense Model has developed as a key concept of corporate governance that enables clear definition of responsibilities, transparency and effective monitoring of organizational processes. The Institute of Internal Auditors (IIA) recognized the need for a standardized framework and presented a model in 2013 that was further improved in 2020 (IIA, 2020).

The three lines of defense model is based on the idea that different functions within an organization have different but complementary roles in risk management. Operational management is responsible for day-to-day management and control, the supervisory functions provide support and monitoring, while internal audit provides an independent assessment of the system's effectiveness. The importance of this model is particularly evident in the public sector, where transparency and accountability are key prerequisites for the effective management of public resources. In Bosnia and Herzegovina, the model is integrated into the financial management and control system (FMC), thus becoming the basis for institutional oversight and control.

The aim of this paper is to analyze the development, structure and application of the three lines of defense model, with special emphasis on its role in improving the management and control system. Special attention is paid to the role of internal audit as a key element of the system, as well as the challenges of implementing the model in practice. The development of the three lines of defense model is closely related to the development of internal audit and the concept of risk management. The roots of internal audit date back to early civilizations, but its modern form developed at the beginning of the 20th century with the emergence of large corporations.

The three lines model helps organizations achieve their goals through effective risk management, transparency and accountability. It distinguishes three levels of roles:

1. Operational management – risk owners,

2. Oversight and compliance functions – support and verification,

3. Internal audit – independent and objective assurance.

In Bosnia and Herzegovina, the model is becoming an important tool within the public sector, especially in the context of financial management and control (FMC), which further highlights its importance for transparency and efficiency

The concept of the Three Lines of Defense was first systematically presented by the IIA in 2013, in response to the need for a clear framework of responsibilities in risk management.

In practice, it has been shown that many organizations have multiple levels of oversight and control, but without clearly defined relationships between them, which often led to ambiguities and overlaps.

In 2020, the IIA published an updated document, The Three Lines of Defense Model, which replaces the previous name “three lines of defense” with a more modern approach that emphasizes value creation and preservation (IIA, 2020). This new model does not see risk management as just a defense mechanism, but as an integrated process of creating added value for the organization’s stakeholders.

2. REASONS FOR MODERNIZING THE MODEL

The updated model introduces several key changes:

Instead of linear defense, the emphasis is on collaboration and interconnection of lines, The governing body now has a more clearly defined accountability to stakeholders,

Internal audit acts as an advisor and partner in improving the business,

There is an increased focus on strategic risk management and integrity.

The Three Line Model is based on six principles defined by IIA Global (IIA, 2020):

1. Governance – the organization must have structures and processes that enable accountability, integrity and transparency.

2. The role of the governing body – oversees the organization, sets the risk appetite and directs resources.

3. The role of management (first and second lines) – manages operations and risks.

4. The role of internal audit (third line) – provides independent and objective assurance.

5. Third line independence – essential for the credibility and authority of the audit.

6. Creating and preserving value – all lines together contribute to the creation and protection of organizational value.

These principles do not divide lines strictly hierarchically, but functionally. A successful organization achieves synergy through communication and cooperation between all lines.

Model structure:

a) First line – Operational management

The first line consists of employees and managers who directly manage business processes and risks. They are the “risk owners”.

Their responsibilities include:

• implementing controls and procedures,

• identifying and mitigating risks,

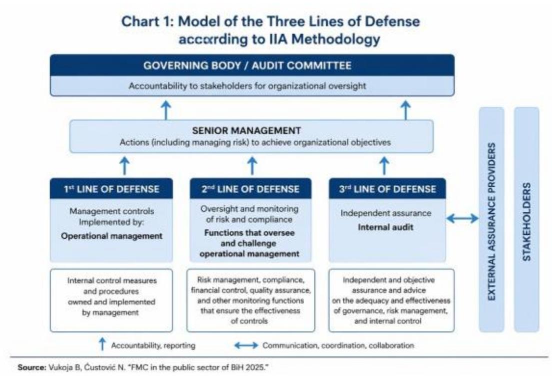
• ensuring that activities contribute to the organization’s goals.

In practice, the first line

In practice, the first line is the foundation of an effective control system – without it, the other lines cannot function successfully.

The following diagram (IIA, 2020) shows the relationships between roles:

Chart 1: Model of three lines of defense according to the II A methodology



Source: Vukoja B, Ćustović N.“ FMC in the public sector of BiH 2025.

b) Second line – Support and oversight functions

The second line includes functions that help monitor and support the first line.

These are most often: risk management, compliance, internal control, security and quality control departments. Their task is to ensure that risks are identified and that the control system is working according to plan.

c) Third line – Internal audit

Internal audit operates independently of management and reports directly to the management body or audit committee.

It provides objective assurance that the management and control system is functioning effectively.

In addition to the audit role, internal audit also provides advisory services that help management improve business processes and risk management.

At the top of the system is the management body – the supervisory or audit committee.

Its task is to ensure the independence of internal audit, approve its plans and monitor the implementation of recommendations.

The three lines of defense model today represents a globally accepted framework for corporate governance and risk management. Its value stems from the clarity of roles and responsibilities and the built-in cooperation mechanisms between management and internal audit.

In the context of the BiH public sector, the model of three lines of defense has additional importance because it contributes to transparency, accountability and efficiency in the management of public resources.

The updated model defines six principles that make up its theoretical basis:

a) Management - ensuring accountability and transparency.

b) The role of the governing body - supervision and delegation of resources.

c) Role of management (first and second line) – implementation of activities and risk management.

d) Role of internal audit - independent assurance and advisory function.

e) Independence of the third line – crucial for credibility.

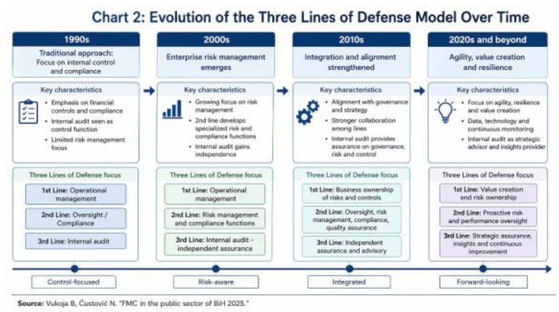
f) Creation and preservation of value - synergistic action of all lines.

Unlike the previous version, the new model no longer views the three lines as strictly separate segments, but as interconnected functional roles.The purpose of the model is not only to "defend against risks", but also to optimize resource management and improve the decision-making process

The model also contributes to the development of the concept of "governance assurance" - a combined approach to internal control, risk management and internal audit, which reduces duplication and increases efficiency.The development of the three lines of defense model shows a clear shift from traditional auditing to an integrated corporate governance system.The model is not only a control tool, but also a concept of value management.

Its importance is particularly evident in public institutions, where a clear demarcation of responsibilities between management, control functions and internal audit is a prerequisite for transparent and efficient use of public funds.

Chart 2: Evolution of the three lines of defense model over time



Source: Vukoja B, Ćustović N.“ FMC in the public sector of BiH 2025.

The theoretical strength of the three lines of defense model lies in its ability to integrate multiple control systems into a single structure.It connects operational operations, control functions and audit into a coherent system that:

• strengthens management accountability,

• enables early identification of risks,

• and establishes self-assessment and correction mechanisms.

3. PRINCIPLES OF THE THREE-LINE MODEL

The three-line model is based on six fundamental principles that define the relationships between key participants in the management and control system. These principles are not just technical elements of the model, but a management philosophy that fosters a culture of integrity, collaboration, and accountability throughout the organization (IIA, 2020).

According to the IIA, the six principles of the three-line model are:

a) Governance,

b) The role of the governing body,

c) The role of management (first and second lines),

d) The role of internal audit (third line),

e) Independence and objectivity of the third line,

f) Creating and preserving value.

a)Principle 1 – Governance

Governance is the basic framework within which all three lines operate. It encompasses policies, processes, and structures that enable the effective achievement of the organization's objectives and ensure oversight of risks.

The governance framework of an organization must include:

• A clear division of responsibilities between operational management, oversight functions and audit,

• Integrity and transparency in decision-making,

• Compliance with regulatory, legal and ethical standards.

According to OECD (2015), good governance is based on accountability, predictability and the rule of law.

In this sense, the three-line model lays the foundation for integrated corporate governance that enables oversight and control without duplication of responsibility.

b)Principle 2 – Role of the governing body

The governing body has ultimate accountability to stakeholders and the public. Its role in the three-line model is particularly emphasized in the 2020 version, where it is seen as a central element of the governance system.

The governing body:

• approves the organization's strategy and policies,

• defines the risk appetite and framework for acceptable behavior,

• appoints and oversees the internal audit,

• ensures that management effectively manages risks and controls.

According to IIA (2020), the governing body must actively monitor all three lines, but without operational interference in their work.This ensures a balance between supervision and operational autonomy of management.

c) Principle 3 – The role of management (first and second line)

Management has a key role in the functioning of the model because it represents the operational core of the organization.

The role of management within the first and second lines is defined through:

Table 1: Role of management

Line	**Primary function**	**Primary goal**	**Examples of activities**
First line	Operational management	Delivery of goals and products	Risk identification, implementation of controls, daily monitoring
Second line	Monitoring and support functions	Risk management support	Risk management support Compliance, quality control, IT security, risk management

Source: Vukoja B, Ćustović N. FMC in the public sector of BiH 2025.

First line Operational management Delivery of goals and products Risk identification, implementation of controls, daily monitoring

Second line Monitoring and support functions Risk management support Compliance, quality control, IT security, risk management

Management ensures that the organization operates in accordance with the set standards and policies and that risks are within an acceptable appetite.

In practice, managers represent the "first line of defense" because they are the first to react to risks that may affect the organization's objectives.

d) Principle 4 – The role of the third line: internal audit

The third line in the model has a unique and independent role. Internal audit provides objective assurance on the effectiveness of the management and control system and advises the board and management on opportunities for improvement (IIA, 2020).

According to the international definition of the IIA (2001):

“Internal audit is an independent and objective function that provides assurance and consulting services with the aim of adding value and improving the organization’s operations.”

Internal audit must operate independently of management, but must also maintain constant communication and cooperation with it.

The role of internal audit can be viewed through three dimensions:

a) Assurance function – assesses the effectiveness of controls and risk management,

b) Advisory function – provides recommendations and helps improve processes,

c) Preventive function – helps prevent fraud and irregularities.

e) Principle 5 – Third-line independence and objectivity

Independence is a fundamental assumption of the credibility of internal audit.

IIA Standard 1100 stipulates that internal audit must be organizationally independent, which means that auditors must not have operational responsibilities in the areas they audit.

Independence is ensured through:

A direct reporting line to the governing body or audit committee,

Functional and administrative autonomy of the audit function,

Protection from management influence on the content of reports and planning of activities.

Objectivity implies a professional attitude of the auditor that enables impartiality and fair judgment.

IIA (2020) emphasizes that independence does not mean isolation – audit must be involved in communication and coordination with other lines, while maintaining professional integrity.

f) Principle 6 – Creating and preserving value

The sixth principle represents the crown of the three-line model.

The goal of all lines is not only to defend against risks, but to actively participate in creating and preserving value for stakeholders.

Each line contributes in its own way:

Table 2: Contribution of lines to creating value

Line	Key contribution to creating value
First line	Second line Establishing a control system and monitoring risks
Second line	Second line Establishing a control system and monitoring risks
Third line	Independent assurance, consulting and contribution to business improvement

Source: Vukoja B, Ćustović N.“ FMC in the public sector of BiH 2025.

According to the updated model (IIA, 2020), the synergy between lines results in a sustainable business model that maximizes value, reduces risks and strengthens the trust of the public and stakeholders.

Mechanisms of cooperation between lines

Cooperation and communication between lines are key prerequisites for the successful application of the model.

In practice, this includes:

• Regular coordination meetings between management and internal audit,

• Exchange of information on risks and control findings,

• Establishment of assurance maps that show the sources of assurance within the organization.Critical review of the application of the principles in practice.

In practice, the application of the principles of the model faces several challenges:

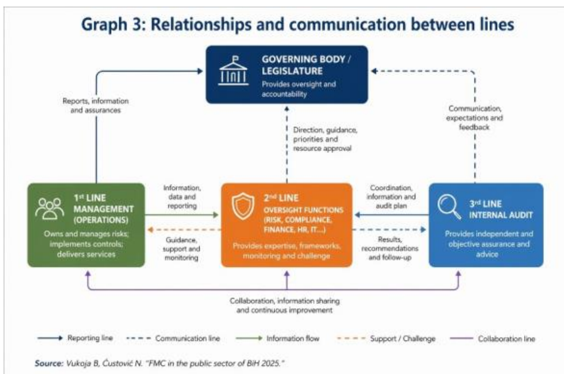
Unclearly delineated responsibilities between the second and third lines,

Limited internal audit resources in public institutions,

Insufficient education about the model among management,

The need to strengthen the culture of accountability and ethics.

Graph 3: Relationships and communication between lines]



Source: Vukoja B, Ćustović N." FMC in the public sector of BiH 2025.

However, IIA (2021) research shows that organizations that have consistently implemented the principles of the model record significantly higher risk management effectiveness and a higher level of stakeholder trust.

The six principles of the three lines of defense model form an integrated framework that enables balanced, transparent and effective management of the organization.

Each principle contributes to building a system that not only protects, but also improves business.

The application of these principles is key to the successful implementation of the model in practice, especially in public institutions and special interest companies.

4. APPLICATION OF THE THREE LINES OF DEFENSE MODEL IN PRACTICE

The application of the three lines of defense model in practice is a key test of its effectiveness.

While the theoretical framework clearly defines the roles and principles, the actual The implementation of the model in organizations depends on:

• the size and complexity of the organization,

• corporate culture,

• regulatory requirements,

• and the level of maturity of the management and audit functions.

Main benefits of implementing the model in BiH

The implementation of the three-line model in the FMC system brings a number of benefits to public sector institutions:

• Clear demarcation of responsibilities among employees,

• Increased transparency in the use of public funds,

• More effective detection of irregularities and fraud,

• Better cooperation between ministries and supervisory bodies,

• Strengthening public trust in institutions.

The Ministry of Finance of BiH (2022) states that institutions that have established the FMC model have recorded an increase in supervision efficiency by more than 30% and a reduction in irregularities in the spending of funds.

Limitations and challenges in BiH practice

Despite progress, BiH faces certain challenges in implementing the model:

• lack of educated internal auditors,

• fragmented application of the model in different institutions,

• lack of coordination between levels of government,

• insufficient digitalization of the supervision process.

According to the PEM-PAL report (2021), BiH is is in the “middle maturity phase” in terms of model implementation.

Further progress requires centralized coordination and continuous employee education.

Key performance indicators of the model in practice

A number of key performance indicators (KPIs) are used to monitor the effectiveness of the three-line model.

The most commonly used indicators include:

• number of irregularities detected in audit reports,

• management response time to recommendations,

• percentage of internal audit recommendations implemented,

• number of risk management training sessions,

• degree of digitalization of the reporting process.

According to a study by IIA Europe (2022), organizations that use KPI systems to monitor the work of the three lines record a 20–40% higher level of risk management efficiency.

CONCLUSION

Today, the three lines of defense model represents a fundamental framework for effective management of organizations in a modern business environment. Its application enables a clear definition of responsibilities, strengthening of the risk management system, and increasing transparency and accountability to stakeholders.

The analysis shows that the greatest value of the model lies in its integrative function – connecting operational management, control functions, and internal audit into a single system. This synergy enables organizations to not only manage risks, but also actively create value.

The role of internal audit is particularly important, as the third line provides independent assurance and contributes to the improvement of business processes. However, its effectiveness depends on the independence, expertise, and support of the governing body.

In the context of Bosnia and Herzegovina, the model plays a key role within the FMC system, where it contributes to transparency and responsible management of public funds. However, its full implementation requires additional efforts in education, digitalization, and strengthening of institutional capacities.

Despite the challenges, the three lines of defense model remains the most accepted international standard for risk management and controls. Its future lies in adapting to new technologies, digitalization, and integration of ESG principles.

In conclusion, the three lines of defense model is not only a control tool, but a strategic framework for managing organizational value and long-term sustainability.

and based on theoretical and practical analysis, it can be concluded that the Three Lines of Defense Model represents the basic architecture of the responsibility system in contemporary organizations.

Its strength lies in integration – each line has its role, but only their synergy brings real results.

In the context of Bosnia and Herzegovina and the wider region, the three-line model should become a standard of management and control in the public sector, not just a recommendation.

Its implementation is not a goal, but a process of continuous improvement.

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