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An Analysis of The Taiwan Army TIVF Procurement Fraud Case

December 2025

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Prepared for the Naval Postgraduate School, Monterey, CA 93943.

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The research presented in this report was supported by the Acquisition Research Program of the Department of Acquisition, Finance and Manpower Naval Postgraduate School.

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ABSTRACT

The problem that motivated this research was the recurring nature of procurement fraud and its significant impact on national security and public trust. The theoretical foundation for this research was based on auditability theory, establishing how organizational accountability rests on the interaction of a competent workforce, capable processes, and effective internal controls. The purpose of this research was to analyze the Taiwan TIFV procurement fraud case by applying the auditability theory, aligning the alleged fraud and mismanagement incidents that occurred to different contract management processes, internal control components, and procurement fraud schemes. The findings of this research may help the Taiwan government and any other Ministry of Defense to understand how procurement fraud occurs, in which contracting life cycle phase fraud happens, which internal control component is deficient to allow these incidents to occur, and how these incidents align with procurement fraud schemes. These research findings may provide more insight and knowledge into procurement fraud in order to better detect and deter procurement fraud in the future. Furthermore, these findings may strengthen and enhance the management of internal controls and may raise awareness of the identified fraud trends by providing insights and recommendations to avoid fraud-conducive conditions.



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ACKNOWLEDGMENTS

First, I would like to convey my sincere gratitude to my advisors, Dr. Rene G. Rendon and Dr. Juanita M. Rendon, for their guidance and patience throughout the entire process of this thesis research. Their continuous support has helped me navigate and withstand periods of significant challenges, especially during the longest government shutdown. Second, I would like to extend my heartfelt appreciation to Lauren at the Graduate Writing Center for her dedicated coaching, uplifting encouragement, and steadfast friendship. Next, I would like to thank the Thesis Processing Office, the library liaison, and the Acquisition Research Program in the Naval Postgraduate School for their informative assistance. Additionally, I would like to offer my deepest thanks to the Defense Procurement Office, the Service Battalion of Army Command Headquarters, the Army Logistics Command of Taiwan's Ministry of National Defense for offering me this precious opportunity to achieve this master's degree. Moreover, special thanks to my mentors, Professor Meng and Professor Liang, for their confidence in me and for offering invaluable clarification and support as I worked through various questions and difficulties. Last, my gratitude goes out to my grandparents, family, fiancé, and friends for their love and encouragement.



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LIST OF ACRONYMS AND ABBREVIATIONS

ACFE	Association of Certified Fraud Examiners
CMMM	Contract Management Maturity Model
CMS	Contract Management Standard
COSO	Committee of Sponsoring Organizations of the Treadway Commission
DAU	Defense Acquisition University
DFARS	Defense Federal Acquisition Regulation Supplement
DoD	Department of Defense
FAR	Federal Acquisition Regulation
FMS	Foreign Military Sales
GAO	Government Accountability Office
ITRI	Industrial Technology Research Institute
NCMA	National Contract Management Association
OLA	Office of the Legislative Auditor
RFP	Request for Proposal
SBA	Small Business Administration
TIFV	Taiwan Infantry Fighting Vehicle
WorldCC	World Commerce & Contracting



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I. INTRODUCTION

The purpose of this chapter is to present an introduction to the research on the analysis of the Taiwan Infantry Fighting Vehicle (TIFV) procurement fraud case (hereafter referred to as the Taiwan TIFV procurement case). First, this chapter will provide a background associated with the historical and geographical position of Taiwan and the TIFV fraud case. Next, the chapter will address the problem statement that prompted this research. Additionally, this chapter will introduce the purpose statement and the research questions with the methodology of collecting and analyzing the data. This chapter will also illustrate the benefits, limitations, and outline of this research. Last, this chapter will conclude with a summary.

A. BACKGROUND

The Republic of China (Taiwan) plays a crucial role of keeping democratic value and peace in the eastern Pacific Ocean region due to historical and geographical reasons. Historically, Taiwan and China share a complex relationship as a result of cultural ties, political contention, and identity issue. Geographically, Taiwan stands at the front line of the First Island Chain as a strategic hub with democratic allies. The international communities recognize its importance and support Taiwan by providing all types of major weapon systems through Foreign Military Sales (FMS). From 1950–2005, Taiwan received the most dollar value of military equipment from the U.S. (Moore et al., 2007). Although Taiwan has been the top customer of FMS in that region for a long time, it is important to note that according to Article 22 of the National Defense Act “Acquisition of weapon equipment shall firstly consider those built domestically” (National Defense Act, 2012). The policy of self-reliance is the highest priority since the very first National Defense Report of Taiwan was published in 1992 (Ministry of National Defense, Taiwan, 1992), and the program for the Taiwan Infantry Fighting Vehicle (TIFV) first appeared in the National Defense Report of 1996 (Ministry of National Defense, Taiwan, 1996) as Yunpao (Clouded Leopard) armored vehicles.



The eight-wheeled Taiwan Infantry Fighting Vehicle (TIFV) was once the pride and glory of Taiwan Defense Industry. Not only did it strictly follow the policy of manufacturing domestic military armament, but it also received authority from the government to outsource to private firms in order to enhance interoperability (Ministry of National Defense, Taiwan, 2011). However, this program with a bright and prosperous future that promised abundant benefits was tarnished by a series of scandals.

In 2012, Chung-Hsin Electric & Machinery Manufacturing Corporation was awarded a U.S. \$147.59 million contract to provide 326 chassis and power-train equipment of TIFV for Taiwan Army (Procurement Center, Armament Bureau, MND, 2012). From the beginning, the case remained high profile due to the fact that the company won the award while proposing only 62% of the budget of the program. Later on, it was uncovered that the company did not manufacture the parts itself, but subcontracted to other uncertified local firms which provided parts imported from China. Considering national security and technical quality concerns, this behavior is severely prohibited and clearly written in black and white in the tender documents (Procurement Center, Armament Bureau, MND, 2012). Moreover, more than 30 people from the military and from 9 different private firms were prosecuted with multiple charges including bribery and fraud (The Control Yuan, Taiwan, 2010).

In 2010, The Control Yuan of The Republic of China (Taiwan) issued an investigation report (The Control Yuan, Taiwan, 2010), which revealed multiple alleged fraud and mismanagement incidents associated with the procurement process for this case. The following section discusses the problem statement for this research.

B. PROBLEM STATEMENT

Procurement fraud occurs in an endless succession, not only becoming the primary impediment to the goal of building domestic weapon equipment but also severely damaging public confidence in national defense. In many procurement fraud cases, especially those that consist of inferior parts, those procurements involve parts that have a higher failure rate, which degrades the operational and lethal capabilities of the weapon system (Zong-Zhi Chen & Yu-Fu Lin, 2021). The problem that prompted this research for



the TIFV procurement fraud case is the negative effects of procurement fraud occurring in an unending flow and also the mismanagement of the time and money expended towards the effort. Given the current laws and regulations, the existence of abundant vulnerabilities and failures of procurement operations becomes the threat and inception of public distrust toward the military (Rendon, 2011). Through analyzing the TIFV procurement case, this research plans to reveal the factors of the fraud formation and to bridge the gap in information associated with the method of mitigating exposure to fraud-conducive conditions. The following section discusses the purpose statement.

C. PURPOSE STATEMENT

The purpose of this research aims to examine the alleged Taiwan TIFV procurement case through the lens of auditability theory. This research seeks to identify how the alleged fraud incidents and the mismanagement incidents align with different contract management processes, internal control frameworks, and procurement fraud schemes. Accordingly, based on the findings, this research study seeks to enhance management of internal control components and raise awareness of the identified fraud trends by providing insights and recommendations to avoid fraud-conducive conditions. Based on the findings, this research will present contracting personnel with solutions to better conduct procurement operations in the future.

D. RESEARCH QUESTIONS

This research addresses the following research questions:

1. In which contracting processes did the alleged fraud and the mismanagement incidents occur in the Taiwan TIFV procurement case?
2. What internal controls were deficient that allowed the alleged fraud and the mismanagement incidents to occur in the Taiwan TIFV procurement case?
3. What were the alleged procurement fraud schemes that happened in the TIFV procurement case?



E. METHODOLOGY

The purpose of this research is to analyze the Taiwan TIFV procurement case. This research draws from the methods used by Huang (2019) by applying the auditability theory and aims to align the alleged fraud and the mismanagement incidents that occurred with different contract management processes, internal control frameworks, and procurement fraud schemes. The analysis of this research includes developing a database from the investigation report issued by Control Yuan on the Taiwan TIFV procurement case. This research reviews publicly available criminal indictments, and press releases from government and other media. This analysis is accomplished in four steps. First, this research identifies all the alleged fraud and mismanagement incidents in the investigation report. Second, the identified incidents are aligned to the appropriate contract life cycle phase. Third, each of those identified incidents are aligned with the internal control component that was deficient and allowed the fraud incident to occur. Fourth, each incident is categorized into standardized fraud schemes. Based on these four steps, this research provides the implications of the findings and recommendations for deterring procurement fraud in the future. The next section discusses the benefits of this research.

F. BENEFITS OF THE RESEARCH

The findings of this research will help the Taiwan government and any other Ministry of Defense to understand how procurement fraud occurs, in which contracting life cycle phase fraud happens, which internal control component is deficient to allow these incidents to occur, and how these incidents align with standard fraud schemes. Through the analysis, the research will give governments and Ministries of Defense more insight and knowledge into procurement fraud in order to better detect and deter procurement fraud in the future. The next section discusses the limitations of the research.

G. LIMITATIONS OF THE RESEARCH

There are several limitations in this research. First of all, the major data source is the investigation report issued by Control Yuan on the Taiwan TIFV procurement case. Therefore, this research can only analyze the case through the lens of the criminal indictments and the mentioned mismanagement incidents included in the report. This



research is limited in that the researcher did not have access to non-public and classified records. Second, this research is uniquely focused on the Taiwan TIFV fraud case, accordingly the law and regulations are applicable only within Taiwan. Third, although the indictments for this case were issued in 2024, it is important to note that this case is over ten years old, which may limit this researcher's ability to determine the motivation for the fraud. The following section provides the outline for this report.

H. OUTLINE OF REPORT

This research report includes five chapters. Chapter I provides the introduction to the background, problem statement, research questions, benefits, and limitations. Chapter II introduces a literature review on auditability theory, contract management processes, internal control frameworks, procurement fraud schemes as well as other research conducted on procurement fraud cases in the Ministries of Defense. Chapter III explains the methodology of accessing, developing the database, and analyzing the data. Chapter IV presents findings and analysis along with the implications of findings and recommendations. Chapter V provides a summary, conclusion, and areas for further research. The following section provides a summary of this chapter.

I. SUMMARY

This chapter presented an introduction to the research on the analysis of the Taiwan TIFV procurement case. First, this chapter provided the background associated with the historical and geographical position of Taiwan and the TIFV procurement case. Next, the chapter addressed the problem statement that prompted this research. Additionally, this chapter introduced the purpose statement and the research questions. Moreover, this chapter introduced the methodology of collecting and analyzing the data. This chapter also illustrated the benefits, limitations, and outline of this research. Lastly, this chapter concludes with a summary.

Next, Chapter II presents a literature review which establishes the foundation of this research. This chapter starts with auditability theory, and then discusses the contract management processes, internal control frameworks, procurement fraud schemes, and mismanagement categories.



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II. LITERATURE REVIEW

A. INTRODUCTION

The purpose of this chapter is to present the literature review which forms the conceptual foundation of this research. The chapter will first discuss auditability theory and how auditability theory forms the basis for this research. Second, the chapter expands on the contract management framework, specifically looking at the contracting life cycle. Next, the chapter introduces the internal control framework to discuss the various components of internal control. Additionally, the chapter reviews various categories of fraud and mismanagement that will be used in the analysis of the data. Moreover, the chapter covers the perspectives of other research, which are focused on fraud in defense procurement cases. Finally, this chapter will end with a brief summary. The following section discusses the auditability theory.

B. AUDITABILITY THEORY

This section offers a synthesis of the differing perspectives within the academic sector which highlights the importance of auditability theory for an organization. Power (1996) argues that the connotation of “audit is an active process of making things auditable instead of a derived and neutral activity” (p. 1). Power (1996) also states that “by making things auditable, organizations increase accountability, transparency and quality assurance” (p. 291). J. Rendon and R. Rendon (2015b) echo this concept and expand this argument with a conceptual framework: the Audibility Triangle. They further explain that with competent personnel, capable processes, and effective internal controls, the three aspects of Audibility Triangle enable an organization to be auditable, and thus successful. The relationship of these components is depicted in Figure 1 (J. Rendon & R. Rendon, 2015b), which demonstrates Power’s (1996) idea of “the system of auditing knowledge” (p. 292).



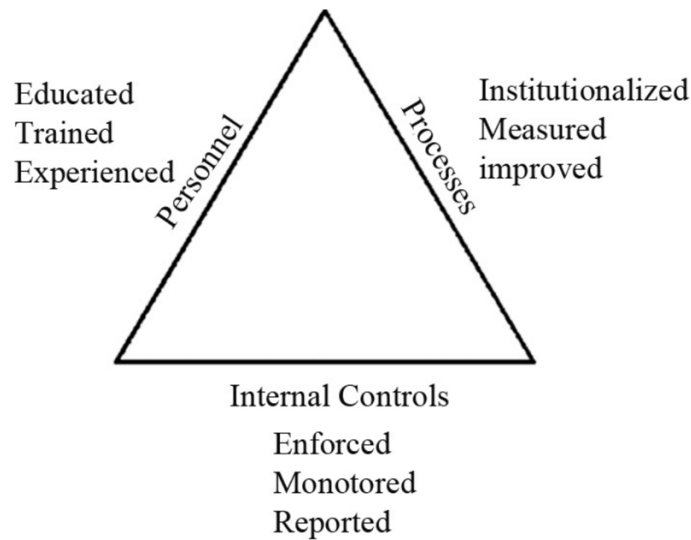


Figure 1. Auditability Triangle. Source: J. Rendon and R. Rendon (2015b).

Auditability theory is applicable for public organizations' procurement operations. The United Nations Procurement Manual states that “with professional discretion and expertise by procurement practitioners, in accordance with the applicable regulations, rules and policies of the Organization and the use of internal control [s],” the public organization must be open to scrutiny to demonstrate transparency and integrity (UN Procurement Division, 2024, p. 10). J. Rendon and R. Rendon (2015a) emphasize the importance of contract management within DoD, in this context the DoD's application of auditability theory may reduce procurement fraud. The next section will introduce the first facet of auditability theory: competent personnel.

1. Competent Personnel

Competent personnel is one of the three components of the auditability triangle (J. Rendon & R. Rendon, 2016). According to J. Rendon and R. Rendon (2016), the component of competent personnel includes the education, training, and experience of performing contract management activities. In 1990, congress passed the Defense Acquisition Workforce Improvement Act (DAWIA) to set the standard and job requirements for the contracting workforce in terms of education, training, and experience. (Defense Acquisition University (DAU), n.d.-a). These requirements are categorized by

each role and position of DoD contracting personnel through different certificate programs offered by DAU. Despite the tailored training programs available, many studies and reports still indicate that inadequately trained members of the acquisition team often create significant competency gaps (GAO, 2015; GAO, 2019; GAO, 2020). For instance, one GAO report points out the lack of training for non-acquisition personnel who also perform acquisition-related functions (GAO, 2019). Another GAO report focuses on the need for and value of passing down lessons learned to compensate for the insufficient experience of personnel (GAO, 2020). In 2015, the GAO published *A Framework for Managing Fraud Risk in Federal Programs*, which also emphasizes the importance of “ensuring employees have sufficient knowledge, skills, and training” to mitigate the risk of fraud (p. 23). In conclusion, competent personnel is one of the crucial components of auditability due to its role in being the first line of defense against procurement fraud (J. Rendon & R. Rendon, 2016). The next section will discuss the capable processes component.

2. Capable Processes

Capable processes are another component of the auditability triangle. Rendon and Rendon (2015b) state that “process capability is measured in terms of processes that are fully established, institutionalized, mandated, integrated with other organizational processes, periodically measured, and continuously improved” (p. 10). Since 1992, the GAO has listed DoD contract management as a high risk area, and currently, it is still on the list (GAO, 2025b). To fight against the deficiencies, DoD prioritizes the development of a competent workforce but loses sight of examining the maturity of contract management processes (R. Rendon, 2015). R. Rendon (2008) established the Contract Management Maturity Model (CMMM) to help organizations assess and improve contract management process capability.

According to the Contract Management Standard (CMS), the contract process includes three contract life cycle phases: the pre-award, award, and post-award (National Contract Management Association, n.d.). R. Rendon’s research (2015) of the contract management process maturity conducted in the U.S. Navy shows “higher maturity levels in the pre-award contracting processes, while lower maturity levels were reflected in the



post-award contracting processes” (p. 1). The contract management framework will be illustrated in detail later in this chapter, and the next section will introduce the last component of the auditability triangle: effective internal controls.

3. Effective Internal Controls

The last component of the auditability triangle is effective internal controls. J. Rendon and R. Rendon (2016) state that “the effective internal controls component of auditability refers to the objectives of enforcing internal control policies to ensure compliance with laws and regulations, monitoring procedures to assess enforcement and reporting any material weaknesses” (p. 754). In 2013, the Committee of Sponsoring Organizations of the Treadway Commission (COSO) (2013) updated the Internal Control Integrated Framework initially issued in 1992. In 2014, the GAO (2014a) issued the Standards for Internal Control in the Federal Government, also known as the “Green Book.” In May 2025, the GAO (2025c) released an update on the Green Book. In the Green Book, the government adapts the COSO framework’s five components of internal control and their related principles and provides examples to better reflect the requirements of the governmental environment. The principles will be addressed in detail later in this chapter. The GAO (2024a) also stresses the importance of internal controls in a recent report about fraud risk management. The DoD Office of Inspector General (OIG) (2024) echoed this concern in its audit of the 2023 fiscal year financial statements). The DoD OIG identified 17 scope-limiting material weaknesses, many which included weaknesses related to deficient internal controls over inventory and government property (p. 28). These deficiencies continue to expose the DoD to significant operational and financial reporting risks, especially in major programs like the F-35 Joint Strike Fighter.

The next section will focus on the perspectives of contract managers and contract management frameworks that relate to the capable processes. Since this research is about procurement fraud, the next section will also explore the contracting life cycle.

C. CONTRACT MANAGEMENT FRAMEWORK

The contract management framework is defined by the Contract Management Standard (CMS) as a framework that aims “to describe contract management in terms of



the processes and stakeholder relationships created through the integration and interaction of job tasks and competencies and the purposes they serve” (NCMA & WorldCC, 2025, p. 3). The CMS notes that the contract life cycle includes three phases: the pre-award, award, and post-award. Based on the perspectives of buyers and sellers, these three phases are broken down into five domains as depicted in Figure 2.

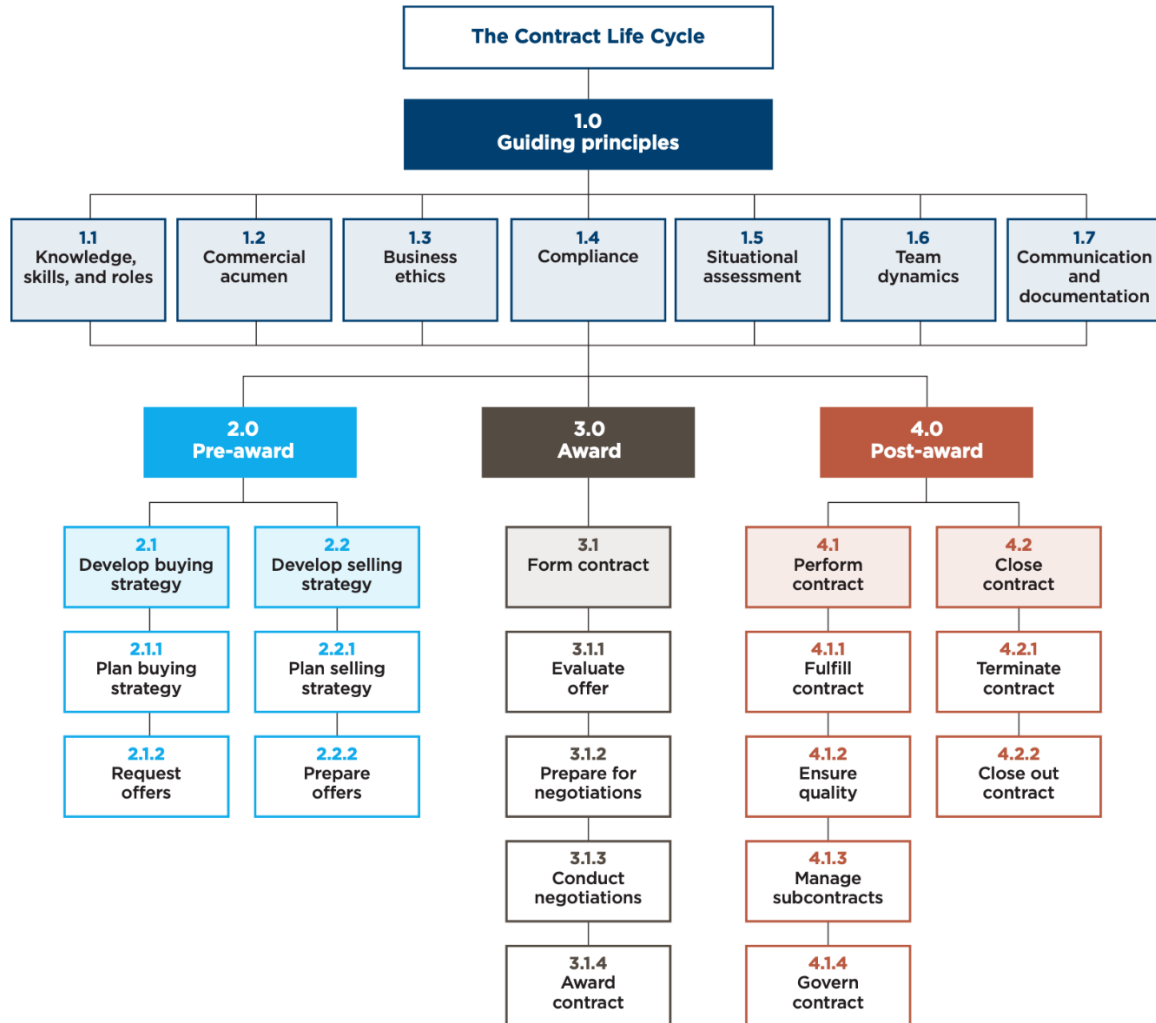


Figure 2. Contract Management Standard. Source: NCMA and WorldCC (2025, p. 6).

1. Pre-Award

The first step of the contract management life cycle is the pre-award phase (NCMA & WorldCC, 2025). According to the CMS, the purpose of the pre-award phase is contract planning, which “includes the business processes for buyers to produce requests and sellers to prepare offers” as reflected in Figure 2 (NCMA & WorldCC, 2025, p. 12). From the buyer’s perspective, the function of the pre-award phase is to complete the task of *developing buying strategy*, which consists of *planning buying strategy* and *request offers* (p. 12). J. Rendon and R. Rendon (2016) state that “Planning solicitations is a process which involves documenting program requirements, selecting contract type and contract award strategy and identifying potential sources of suppliers” (p. 756). For buyers to request offers, they commonly use the document entitled *Request for Proposals* (RFP) for the United States or *Request for Tender* for Europe and other countries. These documents are “used in negotiated acquisitions to communicate government requirements to prospective contractors and to solicit proposals” (FAR 15.203, 2025). As indicated in Figure 2, from the seller’s perspective, the task of *developing selling strategy* includes *planning selling strategy* and *preparing offers*. First, planning selling strategy is the process that sellers use to understand the requirements of buyers and to develop a market strategy. Second, sellers prepare offers to win contracts. The process of the pre-award phase directly influences the outcome of the next two contract life cycle phases (NCMA, 2019).

2. Award

The second phase of the contract management life cycle is the award phase (NCMA & WorldCC, 2025). According to the CMS (2023), this award phase is when buyers and sellers focus on *contract formation*, which is the combined work performance of both buyer and seller from the previous phase. The CMS notes that the process of forming a contract involves *evaluating offer*, *preparing for negotiations*, *conducting negotiations*, and *awarding contract* as reflected in Figure 2. The first process in forming a contract is when buyers analyze the price of a seller’s proposal through historical prices and market data, while also analyzing the cost for performing the contract. Next, the planning negotiations process involves “selecting offers for negotiation, assessing offer analysis, preparing



negotiations, issuing notice of negotiations to offerors, amending offers, and withdrawing offers” (2025, p. 15). Then, during the conducting negotiations process, both parties collaborate to find common ground through clarifications, considerations, and compromises. Finally, the award contract process includes “selecting the successful offeror, finalizing the contract award, and managing disagreements” (NCMA & WorldCC, 2025, p. 15). Managing disagreements involves maintaining legal conformity through resolving conflict among offerors.

3. Post-Award

The last phase of the contract management life cycle is the post-award phase (NCMA, 2019). The CMS notes that the purpose of the post-award phase is *contract administration* and *close out contract*, which covers two domains: perform contract and close contract. Figure 2 shows that during the post-award phase, there are four processes that buyers and sellers can take to perform the contract. These processes consist of *fulfilling contract*, *ensuring quality*, *managing subcontracts*, and *governing contract* (NCMA & WorldCC, 2025). Finally, the close contract step represents the buyer and seller’s completion and acceptance of all the requirements and conditions of the contract, which includes terminating the contract and closing out the contract.

After reviewing the whole contract management framework, which represents the “capable processes” of the auditability theory, the next section will look at the other component of the auditability triangle: internal controls.

D. INTERNAL CONTROL INTEGRATED FRAMEWORK

The Committee of Sponsoring Organizations of the Treadway Commission (COSO) (2013) released its updated internal control integrated framework in 2013 to help organizations to “enhance the likelihood of achieving the entity’s objectives and adapt to change in the business and operating environments” (p. 6). The COSO framework outlines three categories of objectives with different focuses. These objectives include: operations objectives, reporting objectives, and compliance objectives. Figure 3 shows that within each layer of these objectives, the internal control consists of five integrated components: control environment, risk assessment, control activities, information and communication,



and monitoring activities (COSO, 2013). The organizational structure of an entity is also addressed, and the relationship of these three dimensions: three objectives, five components, and the four levels of an entity's structure can be depicted in the form of a cube as reflected in Figure 3. The U.S. federal government has adopted the COSO Internal Control Framework and included it in the Standards for Internal Control in the Federal Government, also known as Green Book (GAO, 2014b, 2025c).

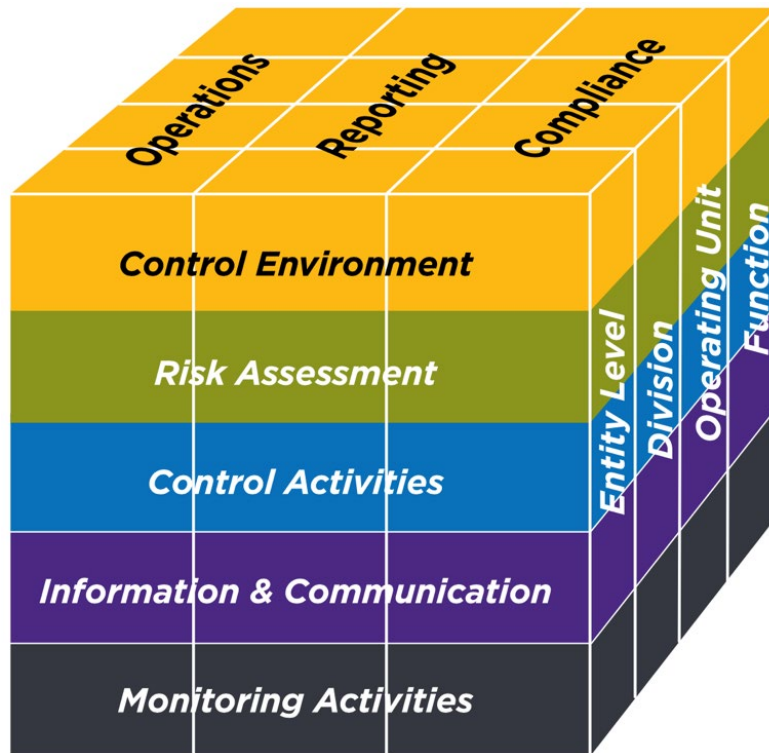


Figure 3. Relationship of Objectives, Components and Organizational Structure. Source: COSO (2013).

1. Control Environment

The COSO (2013) states that “the control environment is the set of standards, processes, and structures that provide the basis for carrying out internal control across the organization” (p. 4). The COSO (2013) further explains that “the control environment comprises the integrity and ethical values” that the senior leadership and executive team not only establish but also reinforce the execution of expected standards (p. 4). According

to the Green Book, which the U.S. federal government uses, “the control environment is the foundation that influences the overall quality for an internal control system” (GAO, 2014b, p. 21).

2. Risk Assessment

The COSO (2013) defines risk assessment as “a dynamic and iterative process for identifying and assessing risks to the achievement of objectives” (p. 4). Additionally, the COSO (2013) notes that risks come from both external and internal directions, and these risks are the obstacles toward achieving the objectives. According to these objectives, organizations can establish well-defined objectives within different levels of categories as the first step to identify and then to analyze the risk. Another step for risk assessment includes “determining methods for mitigating the risks” (J. Rendon & R. Rendon, 2016, p. 757). Based on the significance of the risk, the responses to the risks can be addressed as acceptance, avoidance, reduction, and sharing (GAO, 2014b). Risk assessment needs to be conducted continuously to assure the effectiveness of the risk identification and response mechanism (GAO, 2014b). Furthermore, fraud risk assessment is also part of the risk assessment component of the COSO internal control framework.

3. Control Activities

According to the COSO (2013), “control activities are the actions established through policies and procedures that help ensure that management’s directives to mitigate risks to the achievement of objectives are carried out” (p. 4). The COSO also notes that control activities are performed at every stage throughout the organization. Accordingly, the first step for the leadership of an entity is deciding which control activities should be executed. This decision must be based on a complete assessment of risk (Biegelman & Bartow, 2012). According to J. Rendon and R. Rendon (2016), control activities consist of “verifications, reconciliations, authorizations, segregation of duties and appropriate documentation” (p. 754). The GAO lists examples of common categories of control activities as depicted in Figure 4.



- Top-level reviews of actual performance
- Reviews by management at the functional or activity level
- Management of human capital
- Controls over information processing
- Physical control over vulnerable assets
- Establishment and review of performance measures and indicators
- Segregation of duties
- Proper execution of transactions
- Accurate and timely recording of transactions
- Access restrictions to and accountability for resources and records
- Appropriate documentation of transactions and internal control

Figure 4. Examples of Common Categories of Control Activities. Source: GAO (2014b).

4. Information and Communication

The COSO (2013) states that the information and communication component of the internal control framework is crucial for achieving the entity’s objectives by carrying out and supporting the function of the other components (p. 5). The COSO (2013) also notes that “communication is the continual, iterative process of providing, sharing, and obtaining necessary information” (p. 13). The COSO also states that there are two types of communications: internal communication and external communication (p. 13). Internal communication aims to disseminate information inside the organization to convey a clear message of the importance of the control responsibilities from senior manager to each personnel. As for external communication, on the one hand, it creates the possibility of inbound communication and on the other hand, it responds to external stakeholders by sending out the information of their requirements and expectations (COSO, 2013). The GAO (2024b) points out that “the information and communication component is significant to the objective, along with the underlying principles that management should use quality information to achieve the entity’s objectives” (p. 5). The COSO (2013) also notes that information and communication also includes the organization’s accounting system.



5. Monitoring Activities

The COSO (2013) states that the monitoring activities component of the internal control framework includes two evaluations: ongoing evaluations and separate evaluations. The COSO further explains that the ongoing evaluations provide timely information. Additionally, the COSO (2013) indicates that separate evaluations are conducted periodically based on different risks, effectiveness, and other considerations (p. 5). The purpose of the monitoring activities is to assess the quality of internal controls and to ensure the achievement of the organizations' objectives (J. Rendon & R. Rendon, 2016). The GAO (2024b) also states that "repeated monitoring and periodic evaluations provide insight into the effectiveness of fraud risk management activities" (p. 29).

6. COSO Principles

Within the five components previously discussed, COSO further defines seventeen specific principles that support and clarify each internal control component. These principles explain the requirements of each component. By applying all five components and these principles, organizations can achieve effective internal controls (COSO, 2013). Figure 5 shows the five components as well as the seventeen principles.



COSO Framework Components and Principles	
Control Environment	1. The organization demonstrates a commitment to integrity and ethical values.
	2. The board of directors demonstrates independence from management and exercises oversight of the development and performance of internal control.
	3. Management establishes, with board oversight, structures, reporting lines, and appropriate authorities and responsibilities in the pursuit of objectives.
	4. The organization demonstrates a commitment to attract, develop, and retain competent individuals in alignment with objectives.
	5. The organization holds individuals accountable for their internal control responsibilities in the pursuit of objectives.
Risk Assessment	6. The organization specifies objectives with sufficient clarity to enable the identification and assessment of risks relating to objectives.
	7. The organization identifies risks to the achievement of its objectives across the entity and analyzes risks as a basis for determining how the risks should be managed.
	8. The organization considers the potential for fraud in assessing risks to the achievement of objectives.
	9. The organization identifies and assesses changes that could significantly impact the system of internal control.
Control Activities	10. The organization selects and develops control activities that contribute to the mitigation of risks to the achievement of objectives to acceptable levels.
	11. The organization selects and develops general control activities over technology to support the achievement of objectives.
	12. The organization deploys control activities through policies that establish what is expected and procedures that put policies into action.
Information & Communication	13. The organization obtains or generates and uses relevant, quality information to support the functioning of other components of internal control.
	14. The organization internally communicates information, including objectives and responsibilities for internal control, necessary to support the functioning of internal control.
	15. The organization communicates with external parties regarding matters affecting the functioning of other components of internal control.
Monitoring Activities	16. The organization selects, develops, and performs ongoing and/or separate evaluations to ascertain whether the components of internal control are present and functioning.
	17. The organization evaluates and communicates internal control deficiencies in a timely manner to those parties responsible for taking corrective action, including senior management and the board of directors, as appropriate.

Figure 5. Five Components and Seventeen Principles. Source: COSO (2023, p. 16).



This section focuses on the components and principles of internal controls, which are the key to achieving the objectives of organizations. The lack of effective internal controls may leave loopholes that may allow employees, government officials, and contractors to commit fraud in the contracting life cycle phases. The following section will present the various types of procurement fraud schemes that are used to inform the subsequent analysis of the alleged TIFV procurement case.

E. PROCUREMENT FRAUD SCHEMES

In 2023, the COSO and the Association of Certified Fraud Examiners (ACFE) worked together and published the updated *Fraud Risk Management Guide* (COSO & ACFE, 2023a). This guide is designed for the users who are familiar with the *Internal Control Integrated Framework* of the COSO. In this guide, fraud is defined as “any intentional act or omission designed to deceive others, resulting in the victim suffering a loss and/or the perpetrator achieving a gain” (COSO & ACFE, 2023b, p. 8). According to J. Rendon and R. Rendon (2015b), the procurement fraud schemes are classified into six categories. These categories, which are addressed in detail later, include: collusion, conflict of interest, bid rigging, billing/cost/pricing schemes, fraudulent purchases, fraudulent representation (p. 9). Figure 6 shows the categories of procurement fraud schemes and examples of fraud within each category (p. 9).

Categories of Procurement Fraud Schemes					
Collusion	Conflict of Interest	Bid Rigging	Billing/Cost/Pricing Schemes	Fraudulent Purchases	Fraudulent Representation
Bribes & Kickbacks	Conflict of Interest	Collusive Bidding by Contractors	Cost Mischarging	Purchases for Personal Use or Resale	Failure to Meet Contract Specifications
Split Purchases	Unjustified Sole Source Awards	Excluding Qualified Bidders	Defective Pricing	Unnecessary Purchases	Product Substitution
	Phantom Vendor	Leaking Bid Data	Change Order Abuse	Imprest Fund Abuse	
		Manipulations of Bids	Co-mingling of Contracts		
		Rigged Specifications	False, Inflated, or Duplicate Invoices		
		Unbalanced Bidding	False Statement and Claims		

Figure 6. Categories of Procurement Fraud Schemes. Source: J. Rendon and R. Rendon (2015b, p. 9).



1. Collusion

According to *Black's Law Dictionary* (2004), collusion is “an agreement to defraud another or to do or obtain something forbidden by law” (*Black's Law Dictionary*, 2004, p. 281). J. Rendon and R. Rendon (2015b) expand the definition of collusion to specific types such as bribery, kickbacks, and spilt purchases. Joseph T. Wells (2018) states that bribery is “the offering, giving, receiving, or soliciting of corrupt payments (i.e., items of value paid to procure a benefit contrary to the rights of others) to influence an official act or business decision” (p. 27). Wells (2018) also explains that “bribery often takes place in the form of kickbacks” (p. 27). Wells (2018) further illustrates that kickbacks are one kind of bribery between two parties that occurs when a negotiated commission is paid to exchange for favors or information (p. 27). J. Rendon and R. Rendon (2015b) offer an example of collusion and explain that “split purchases are often seen in the government purchasing card program where purchases that generally would not meet the micro-purchase threshold of \$3,000 are deliberately split into two or more purchase transactions to circumvent the contracting rules and regulations” (p. 8).

2. Conflict of Interest

Black's Law Dictionary (2004) defines conflict of interest as “a real or seeming incompatibility between one’s private interests and one’s public or fiduciary duties” (p. 319). Wells (2018) states that conflict of interest schemes “involve the exertion of an employee’s influence to the principal’s detriment” (p. 29). When a conflict of interest happens, the government officials harm the government by not adhering to the best interest of the government (J. Rendon & R. Rendon, 2015b). The FAR 3.11 sets the general rule to avoid any conflict of interest and provides government officials with the policy and guidance to tackle the situations of conflict of interest (FAR 3.11, Preventing Personal Conflicts of Interest for Contractor Employees Performing Acquisition Functions, n.d.).

3. Bid Rigging

J. Rendon and R. Rendon (2015b) state that “bid rigging involves exploitation of the bidding process by falsifying information such as price competition, agency needs, and contract specifications with the intent to circumvent the standard bidding process” (p. 8).



They explain that bid rigging happens in different steps of the pre-award phase and is categorized into different types. These types of bid rigging include bid suppression, complementary bidding, and subcontracting. According to J. Rendon and R. Rendon (2015 b) bid suppression happens when all contractors negotiate to choose only one party to bid. After awarding the contract, the participants receive a kickback or the chance to be subcontractors. Complementary bidding occurs when all contractors other than the self-selected contractor present unacceptable terms or overbid (Huang, 2019).

4. Billing, Cost, and Pricing Schemes

According to J. Rendon and R. Rendon (2015b), “billing, cost, or pricing type fraud schemes involve a misrepresentation of financial information as well as intentionally mischarging” (p. 9). They further state that “defective pricing, change order abuse, and co-mingling of contracts are also examples of cost and pricing schemes” (J. Rendon & R. Rendon, 2015b, p. 9). Defective pricing happens where a contractor provides imprecise or out-of-date pricing data. Change order abuse is when a contractor inflates the price on purpose. Co-mingling is defined “as contractors with multiple, similar work orders charging the same personnel, fees, or expenses to more than one of the work orders, resulting in overbilling (DAU, 2025).

5. Fraudulent Purchases

J. Rendon and R. Rendon (2015b) state that “fraudulent purchases involve purchases made which are beyond the government requirements with the intent to defraud the government” (p. 9). Fraudulent purchases occur in the situations where a government employee uses public funds to purchase merchandise and keeps them for personal use or service or to acquire personal service (Vona, 2012). One of the GAO reports points out that numerous fraudulent purchases occur when using governmentwide purchase cards (GAO, 2008).

6. Fraudulent Representations

According to J. Rendon and R. Rendon (2015b), “fraudulent representation involves falsely and intentionally misrepresenting goods and services” (p. 9). They also



provide that product substitution is one of the examples of fraudulent representations. Many experts within the acquisition community refer to fraudulent representations as *bait and switch* (O'Connor, 2018, p. 88). Grennan and McCrory (2016) use the case of AEY, Inc. as an example to demonstrate what a “bait and switch” is. They explain how AEY, Inc. substituted the ammunition they contractually agreed to provide for outdated ammunition from the People’s Republic of China ammunition (p. 28). This violates the Defense Federal Acquisition Regulation Supplement (DFARS) 252.225-7007, which states that munitions “may not be acquired, directly or indirectly, from a Communist Chinese military company” (DFARS 252.225-7007 Prohibition on Acquisition of Certain Items from Communist Chinese Military Companies., n.d.).

This section introduced the procurement fraud schemes; the next section will present mismanagement categories.

F. MISMANAGEMENT CATEGORIES

According to the GAO (2025a), mismanagement is defined as “creating a substantial risk to an agency’s ability to accomplish its mission” (p. 2). Fraud and mismanagement often comes hand-in-hand, and the differentiation lies in whether or not the act is legal (Petrucci, 2017a). Petrucci further explained that “mismanagement is the process or practice of managing ineptly, incompetently, or dishonestly but does not rise to a criminal classification” (p. 27). Although there is no academic standard or universally agreed-upon classification of mismanagement categories that can cover every scenario, the following subsections discuss how common themes emerge from categories from past cases and research (Rendon, 2025).

1. Financial Mismanagement

Financial mismanagement includes misuse or misappropriation of funds, poor financial planning and oversight, and lack of internal controls. In the book entitled *Preventing Fraud and Mismanagement in Government*, Petrucci (2017b) used a scene from the movie *Wall Street* as a metaphor to demonstrate the real-world examples of government financial mismanagement. He highlighted how Bud Fox’s restructuring Blue Star Airlines prioritized short-term gains over long-term costs, which is a similar scenario



to how the New Jersey government made short-sighted financial decisions to avoid raising taxes in handling the pension funds during the administration of Governor Chris Christie (Petrucelli, 2017b, p. 134).

2. Operational Mismanagement

Operational mismanagement includes operational inefficiencies, inefficient processes and workflows, and poor resource allocation. In the document *Reducing mismanagement: GAO Recommendations for Improving the SBA*, GAO identified several operational mismanagement examples (United States Congress House Committee on Small Business, 2024). For example, the Small Business Administration (SBA) is using only 10% of their office space, which reduces their efficiency and reflects inadequate allocation of resources (p. 2). Also, the SBA failed to assess the operational risks in terms of conducting activities in post-disaster environments, especially in rural areas (2024, p. 11).

3. Leadership and Strategic Mismanagement

Leadership and strategic mismanagement include: a lack of clear vision, poor strategic planning, a lack of accountability, and ineffectual or unethical leadership. The insight and vision of the leadership is important to any entity. In the case of national leaders, their directions can be pivotal to the whole well-being of the world (AlQershi, 2020). For example, in the article *Coronavirus Covid-19: The Bad Leadership Crisis and Mismanagement*, the author pointed out that delayed responses, lack of coordinated strategies, and failure to prepare for foreseeable risks of many national leaders amplified global vulnerabilities (AlQershi, 2020).

4. Legal and Ethical Mismanagement

Legal and ethical mismanagement include non-compliance with laws and regulations, lack of transparency, and a breach of public trust. The Office of the Legislative Auditor (OLA) issued a report, which identified ethical governance and accountability weakness of several Minnesota state agencies (OLA, 2024). In findings 3, 4, 5 and 6, the report revealed that the Departments of Corrections, Natural Resources, and Public Safety



approved system-calculated retroactive payments while realizing the payments were not correct. The approval of inaccurate payments violated the principles of fairness and accountability, which can result in the erosion of public trust.

5. Human Resources Mismanagement

Human resources mismanagement includes a lack of employee development and feedback, poor communication practices, and mistakes in employee classification. Pertrucelli (2017a) stated that “Human resources is the gatekeeper and first line of defense against fraud and mismanagement” (p. 278). The GAO report, *COVID Relief: Fraud Schemes and Indicators in SBA Pandemic Program*, provided an example that “The lack of a dedicated antifraud entity presented challenges and missed opportunities for SBA as it worked to establish and implement programs early in the pandemic” (GAO, 2023, p. 114). This reflected the importance of human resources and its role of avoiding fraud and mismanagement.

6. Other Aspects of Mismanagement

Other aspects of mismanagement cover all the other scenarios that fall outside of the previously discussed categories. For instance, these scenarios may include document and information mismanagement.

This section introduced the mismanagement categories. The next section will present other research on procurement fraud.

G. OTHER RESEARCH ON PROCUREMENT FRAUD

Procurement fraud has been a major loophole of national security and defense industry (GAO, 2025a). The academic area continuously seeks to investigate the origin of and solutions to suppress this concern. Although the literature review has covered a broad body of research on auditability theory, contract management framework, internal control integrated framework, and procurement fraud schemes, the execution of these theories offers a more transparent diagnosis of the issues and corresponding remedies. The following are some past research cases on procurement fraud.



Tan Li Huang Joyce (2013) conducted an analysis of twenty fraud cases by diagnosing internal control components failures of the COSO framework. She concluded that ineffective control environment, inefficient control activities, and lack of monitoring were the central cause to most fraudulent incidents.

Peter W. Chang (2013) developed a survey to analyze the DoD's contracting workforce's level of fraud knowledge, which added a perceptual layer to substantiate the importance of awareness of fraud risk. The survey was aligned with the contract management processes and internal control components. He found that during the source selection and contract administration phases, there exist significant gaps in the workforce's fraud knowledge levels.

J. Rendon and R. Rendon (2015a) further expanded the scope to organizational auditability. They used the same framework to identify the weakness of fraud prevention and validated that the control activities and monitoring during source selection and administration phases are the most vulnerable.

Whiteley, Foster, and Johnson (2017) analyzed the U.S Navy husbanding services: the Fat Leonard fraud case. Their findings included the internal control deficiencies in the control environment and information and communication components occurring during the pre-award and post-award phases. They recommended a shift from post-incident investigations to preventive system design, recommending the use of early-warning indicators. They also recommended real-time risk monitoring and stronger integration of internal control governance mechanisms throughout the acquisition life cycle (Whiteley et al., 2017).

Jonathan E. Marshall (2019) extended fraud research by constructing a detailed database of proven fraud cases within U.S. Army procurement. His research results indicated that fraud occurs across the entire contract life cycle, and collusion emerged as the most frequent fraud scheme. He also pointed out that ethical deficiencies were the most prevalent internal control deficiency, and found heightened risks in overseas contracting, subcontractor chains, and reliance on civilian personnel (Marshall, 2019).



Huang (2019) conducted an in-depth investigation of Taiwan's Navy minehunter procurement scandal. Her findings revealed that source selection and contract execution were the most vulnerable stages, and fraud schemes often relied on shell companies, falsified financial records, and bribery through intermediaries. Furthermore, her research provided a rare non-U.S. perspective, which demonstrated that while fraud typologies may be similar, the institutional vulnerabilities differ across national systems (Huang, 2019).

Although these studies provide a broad understanding of procurement fraud, this research hopes to continue to investigate another fraud case in Taiwan, offering valuable insight into how procurement fraud may manifest in a different institutional and geopolitical setting. Accordingly, this study aims to contribute a more nuanced understanding of procurement fraud by contextualizing it within Taiwan's defense acquisition environment.

H. SUMMARY

The purpose of this chapter was to present the literature review, which establishes the foundation for this research. The chapter first discussed auditability theory and how auditability theory forms the basis for this research. Second, the chapter expanded on the contract management framework, specifically looking at the contracting life cycle. Next, the chapter introduced the internal control framework to discuss the various components of internal control. Additionally, the chapter reviewed various categories of fraud and mismanagement that were used in the analysis of the data. Moreover, the chapter covered the perspectives of other research focused on procurement in defense procurement cases. Finally, this chapter ended with a brief summary.



III. METHODOLOGY

A. INTRODUCTION

The purpose of this chapter is to provide an overview of the methodology used in this research. This chapter will first discuss the source of the data that will be used in the analysis and discuss how that data was accessed. Next, the chapter will discuss how the data will be analyzed and how the analysis will be presented in the findings. Finally, this chapter will end with a brief summary.

B. DATA SOURCE

The primary source of data in this research is the Investigation Report on the Taiwan TIFV case conducted by The Control Yuan of The Republic of China. This report lists all the alleged fraud and mismanagement incidents, which is the foundation of this research's database. The tender document of procuring the chassis and power-train equipment of TIFV is also utilized to help better understand the case. Additionally, the indictment documents and other court decision documents are used as references.

C. DATA ACCESS

All the data utilized in this research is from publicly available resources. The Investigation Report on the Taiwan TIFV case was retrieved from the Taiwan Control Yuan website (<https://www.cy.gov.tw/CyBsBoxContent2.aspx?n=718&s=17302>). The tender document of procuring the chassis and power-train equipment of TIFV was retrieved from Taiwan's government procurement information website (<https://web.pcc.gov.tw/pis/>). The indictment documents were retrieved from Taiwan Taichung District Prosecutor's Office website (<https://www.tcc.moj.gov.tw/296004/296015/?q=動力底盤>). The Judgment of the Criminal Court documents were retrieved from the Taiwan High Court website (<https://judgment.judicial.gov.tw/FJUD/default.aspx>).



D. DATA COLLECTION AND ANALYSIS

Using the publicly available resources previously discussed, the research will create an excel database of the procurement fraud incidents. The excel document will include the collected data in a tabular format with columns for fraud incident, contract life cycle phase, internal control component, fraud scheme category, and mismanagement category. After collecting all the data, this analysis will be accomplished in four steps. First, this research will identify all the alleged fraud and mismanagement incidents in the investigation report. Second, the identified incidents will be aligned to the appropriate contract life cycle phase, as reflected in the CMS. Third, each of those identified incidents will be aligned with the internal control component, as reflected in the COSO framework, that was deficient and allowed the fraud incident to occur. Fourth, each incident will be categorized into the standardized fraud schemes. Fifth, each incident will be categorized into mismanagement category previously discussed. The findings will be presented as charts, tables, etc. Based on these four steps, this research will provide the implications of the findings and recommendations for deterring procurement fraud in the future.

E. SUMMARY

The purpose of this chapter was to provide an overview of the methodology used in this research. This chapter first discussed the source of the data that was be used in the analysis and discussed how that data was accessed. Next, the chapter discussed how the data was collected and analyzed and how the analysis will be presented in the findings. Finally, this chapter ends with a brief summary.



IV. FINDINGS AND ANALYSIS

A. INTRODUCTION

The purpose of this chapter is to present the findings and analysis of the Taiwan TIFV procurement case. First, the chapter will introduce the database of the identified alleged fraud and mismanagement incidents in the investigation report. The findings include: a description of which contract life cycle phases the alleged fraud and mismanagement incidents occurred in; which internal control component was deficient; and to which fraud schemes and mismanagement categories the incidents were aligned. Next, the chapter will provide a discussion of the findings. Furthermore, the implications of the findings will be presented. Then, the chapter will provide recommendations based on the findings. Finally, this chapter will end with a brief summary.

B. FINDINGS

The findings from this research were from the database that the researcher created by reviewing the alleged fraud and mismanagement incidents from the Investigation Report of the Control Yuan on the Taiwan TIFV “Chassis and Power-chain System” procurement case. This research also reviews publicly available criminal indictments and court decision documents as references. Table 1 lists nine alleged fraud and mismanagement incidents that the Taiwan MND was responsible for in the TIFV procurement process. In the same way, Table 2 lists nine alleged frauds attributed to Chung-Hsin Co. and the other subcontractors in the TIFV procurement case.



Table 1. Alleged Fraud and Mismanagement Incidents Associated with MND in the TIFV Procurement Case. Adapted from Taiwan Control Yuan (2010).

No/ Reference Remark	Alleged Fraud and Mismanagement Incidents	Contract Life Cycle Phases (number/ total)	Internal Control Components (number/total)	Fraud Scheme	Mismanagement Categories
1/ MND 1	The Taiwan Infantry Fighting Vehicle (TIFV) Case marked a national defense and security milestone by building the indigenous weapon. Given the high budget, the importance, and the complexity of the nature of the case, the procurement method should not use the lowest tender but instead the most advantageous tender is the most suitable choice because it ensures the quality of the end items meet standard.	Pre-award: Develop Buying Strategy (1/2)	Risk Assessment (1/3)		Operational Mismanagement (1/3)
2/ MND 2	The Ministry of National Defense failed to adequately set the procurement price benchmarks (the government estimate) based on the past bids, government database,	Pre-award: Develop Buying Strategy (2/2)	Risk Assessment (2/3)		Operational Mismanagement (2/3)



No/ Reference Remark	Alleged Fraud and Mismanagement Incidents	Contract Life Cycle Phases (number/ total)	Internal Control Components (number/total)	Fraud Scheme	Mismanagement Categories
	and market survey data. The budget for procuring the “Chassis and Power-train System” of TIFV was U.S. \$242 million, but the winning bid was only U.S. \$148 million. The report highlighted that there was a huge gap of U.S. \$94 million, which was around 62% of the government estimate.				
3/ MND 3	MND failed to question the qualification of the contractor due to its low bid. According to Taiwan’s Government Procurement Act Article 58: “When a procuring entity conducts a procurement using the lowest bid award method, the bid price submitted by a tenderer shall not exceed the government estimate (the procurement price benchmarks). However, if the award price is less than eighty percent of	Award: Form Contract (1/1)	Risk Assessment (3/3)		Operational Mismanagement (3/3)



No/ Reference Remark	Alleged Fraud and Mismanagement Incidents	Contract Life Cycle Phases (number/ total)	Internal Control Components (number/total)	Fraud Scheme	Mismanagement Categories
	the government estimate, the procuring entity shall require the tenderer to provide a cost analysis or other supporting documents, and only after reviewing and confirming that the price is reasonable may the award be made” (Government Procurement Act, 2019). Although the MND asked the tenderer to submit the cost analysis for this case, but the MND reviewed the analysis and decided that there was no unreasonableness and that the reduced cost posed no risk to the quality and ability to perform the contract.				
4/ MND 4	A civilian employee at the 209 th Arsenal of Armaments Bureau received a bribe of approximately U.S. \$40,000 from one of the subcontractors under the guise of “introduction fee.” He introduced three other	Post-Award: Perform Contract (1/6)	Monitoring Activities (1/3)	Collusion (1/1)	



No/ Reference Remark	Alleged Fraud and Mismanagement Incidents	Contract Life Cycle Phases (number/ total)	Internal Control Components (number/total)	Fraud Scheme	Mismanagement Categories
	civilian employees to work at the factories of the subcontractors to carry out the welding of the upper and lower fuel tanks. Their actions violated the regulation of prohibition for government employees to work part-time jobs.				
5/ MND 5	The civilian employee who received the bribe from one of the subcontractors and worked at the 209 th Arsenal of Armaments Bureau, was responsible for the management of the inventory. The work included receiving, inspection, delivery inspection, allocation, and storage of the military equipment. He assisted the subcontractor to accelerate the inspection procedures and cover the potential delay penalties. During the 7 th batch of the delivery period,	Post-Award: Perform Contract (2/6)	Monitoring Activities (2/3)		Leadership and strategic mismanagement (1/2)



No/ Reference Remark	Alleged Fraud and Mismanagement Incidents	Contract Life Cycle Phases (number/ total)	Internal Control Components (number/total)	Fraud Scheme	Mismanagement Categories
	the subcontractor could not meet the deadline of June 15, 2014 to deliver the items due to the import process. To avoid the delay fine of U.S. \$ 18,000, the subcontractor asked the civilian employee to take out the items from the 6 th batch of goods that were delivered and mixed them into the 7 th batch to be inspected.				
6/ MND 6	The subcontractor entered the inventory with the civilian employee without registration and accomplished the adulteration event by changing the labels and facilitated the inspection together.	Post-Award: Perform Contract (3/6)	Monitoring Activities (3/4)	Fraudulent Representation (1/1)	
7/ MND 7	The task of managing the inventory lacked a cross-supervision mechanism. If there had existed an acting officer to co-manage, it is likely that the situation of	Post-Award: Perform Contract (4/6)	Monitoring Activities (4/4)		Leadership and Strategic Mismanagement (2/2)



No/ Reference Remark	Alleged Fraud and Mismanagement Incidents	Contract Life Cycle Phases (number/ total)	Internal Control Components (number/total)	Fraud Scheme	Mismanagement Categories
	swapping the inspection goods might not have happened.				
8/ MND 8	The involvement of this case was mostly civilian government employees in the MND. This indicated that there existed significant insufficient legal and ethical education at the grassroots level.	Post-Award: Perform Contract (5/6)	Control Environment (1/2)		Human Resources Mismanagement (1/1)
9/ MND 9	The governance oversight was weak and lacked the ability to detect fraudulent behaviors and financial irregularities. The leadership failed to effectively manage and supervise not only personnel evaluations, gate access control, and operational spot checks, but also the acceptance and verification of delivered items. This weak oversight of the quality checking process impaired transparency and	Post-Award: Perform Contract (6/6)	Control Environment (2/2)		Financial Mismanagement (1/1)



No/ Reference Remark	Alleged Fraud and Mismanagement Incidents	Contract Life Cycle Phases (number/ total)	Internal Control Components (number/total)	Fraud Scheme	Mismanagement Categories
	accountability, allowing financial losses and mismanagement incidents to go unnoticed. To prevent recurrence, fraud prevention should be implemented in daily management and at every level of the unit.				



Table 2. Procurement Fraud Schemes Associated with Chung-Hsin Co. in the TIFV Procurement Case. Adapted from Taiwan Control Yuan (2010).

No/ Reference Remark	Alleged Fraud and Mismanagement Incidents	Contract Life Cycle Phases (number/total)	Internal Control Components (number/total)	Fraud Scheme
1/ CH 1	In 2012, the MND conducted an open tender of “Chassis and Power-chain System” of TIFV with a budget of U.S. \$242 million for 326 units. The winning bidder would also be eligible to participate in the “limited tendering procedures” for an additional 334 units. In an attempt to obtain the anticipated benefits from the contract and its subsequent expansion project, two companies conveyed the intention to cooperate with Chung-Hsin Co. The three companies signed a joint cooperation agreement to win the tender.	Pre-award: Develop Selling Strategy (1/2)	Control Environment (1/8)	Bid Rigging (1/2)
2/ CH 2	During the initial research and development phase of TIFV, MND worked with the Industrial Technology Research Institute (ITRI) to	Pre-award: Develop Selling Strategy (2/2)	Control Environment (2/8)	Bid Rigging (2/2)



No/ Reference Remark	Alleged Fraud and Mismanagement Incidents	Contract Life Cycle Phases (number/total)	Internal Control Components (number/total)	Fraud Scheme
	manufacture 28 prototypes. The IP of the blueprint of the engineering design drawings and maintenance tools belonged to ITRI and valued U.S. \$3 million. Chung-Hsin Co. and other colluded subcontractors secretly reached out to two technicians of the ITRI and deliberated to get the blueprint in exchange of their future position in Chung-Hsin Co. and the profit of U.S. \$10 thousand per delivered vehicle as technical service fees. By acquiring the proprietary design data before the solicitation phase, Chung-Hsin Co. gained an unfair competitive advantage over other potential bidders and was able to tailor its proposal to align precisely with the technical requirements. This incident constituted a clear form of bid rigging that undermined the integrity of the			



No/ Reference Remark	Alleged Fraud and Mismanagement Incidents	Contract Life Cycle Phases (number/total)	Internal Control Components (number/total)	Fraud Scheme
	procurement process. The two technicians accepted the offer and emailed all the blueprint and design drawings. The exchange of future employment and financial benefit for privileged information also represented a conflict of interest, as the ITRI technicians violated their fiduciary duties to the government. Nevertheless, the dominant nature of this misconduct lies in bid rigging, since the premature access to controlled design information directly distorted fair competition during the bidding phase.			
3/ CH 3	According to Taiwan's Government Procurement Law Article 70, the contractor shall not subcontract the principal portion of the contract. Subcontracting of any part shall require prior approval from the procuring	Post-award: Perform Contract (1/7)	Control Activities (1/1)	Collusion (1/2)



No/ Reference Remark	Alleged Fraud and Mismanagement Incidents	Contract Life Cycle Phases (number/total)	Internal Control Components (number/total)	Fraud Scheme
	entity. This policy is to ensure that the quality of the goods and the materials and sources of the goods are reliable. During the investigation of the TIFV procurement case, prosecutors discovered that Chung-Hsin Co. had secretly subcontracted major work packages to over six firms, many of which had previously been involved in at least thirteen fraudulent bidding incidents. Through this concerted collusion, the parties created a façade of open competition while ensuring that the contract award and subsequent subcontracts would obtain improper financial benefits. Although the scheme also demonstrated elements of bid rigging, as the bidders jointly orchestrated and falsified the bidding process, the dominant nature of this misconduct is			



No/ Reference Remark	Alleged Fraud and Mismanagement Incidents	Contract Life Cycle Phases (number/total)	Internal Control Components (number/total)	Fraud Scheme
	collusion, since multiple firms conspired to deceive the government and share the illicit gains under a coordinated arrangement.			
4/ CH 4	The subcontractor issued “delivery notes” (invoices) for welding work more than once for the same job that enabled welders introduced by the civilian employee at the 209 Arsenal to claim payment. The subcontractor manipulated the accounting records and submitted the fake invoices to the Chung-Hsin Co. to exploit the profit.	Post-Award: Perform Contract (2/7)	Control Environment (3/8)	Billing Schemes (1/1)
5/ CH 5	After providing a bribe of U.S. \$40 thousand to the civilian employee at the 209 Arsenal, the subcontractor asked the employee to assist passing the delivery of goods. To cover up the delay of the goods, the subcontractor went to the inventory and changed the label of the delivery date.	Post-Award: Perform Contract (3/7)	Control Environment (4/8)	Collusion (2/2)



No/ Reference Remark	Alleged Fraud and Mismanagement Incidents	Contract Life Cycle Phases (number/total)	Internal Control Components (number/total)	Fraud Scheme
6/ CH 6	In the tender documents, the regulation clearly stated that all the parts used in this case should not be manufactured in China due to the goal and policy of building indigenous weapons and also the consideration of the national security (Procurement Center, Armament Bureau, MND, 2012). The contractors willfully and knowingly violated this regulation to reduce cost and provided substandard parts.	Post-Award: Perform Contract (4/7)	Control Environment (5/8)	Fraudulent Representation (1/4)
7/ CH 7	In order to cover up using parts from China, the contractors established a shell company to execute origin laundering. (For example, in the AEY case, the contractor substituted the outdated ammunition from China by changing the labels of the package). In this case, the contractors purchased the parts from China and handled customs clearance for	Post-Award: Perform Contract (5/7)	Control Environment (6/8)	Fraudulent Representation (2/4)



No/ Reference Remark	Alleged Fraud and Mismanagement Incidents	Contract Life Cycle Phases (number/total)	Internal Control Components (number/total)	Fraud Scheme
	importation by issuing invoices, packing lists, and import declarations through the shell company established in Anguilla, West Indies. Finally, the goods were imported through the subcontractor's company and delivered from the main contractor.			
8/ CH 8	During the investigation, the prosecutor also found out that the subcontractors imported used parts from a Thailand manufacturer at a low cost. The subcontractors then refurbished these parts and delivered as new.	Post-Award: Perform Contract (6/7)	Control Environment (7/8)	Fraudulent Representation (3/4)
9/ CH 9	In order to conceal the use of defective and non-compliant parts, the subcontractors conspired with the inspection company to issue falsified inspection certificates and fabricated quality reports that falsely indicated all delivered components met contractual	Post-Award: Perform Contract (7/7)	Control Environment (8/8)	Fraudulent Representation (4/4)



No/ Reference Remark	Alleged Fraud and Mismanagement Incidents	Contract Life Cycle Phases (number/total)	Internal Control Components (number/total)	Fraud Scheme
	and technical specifications. These deceptive documents were deliberately submitted to misrepresent the true condition of the equipment and secure payment under false pretenses.			



C. DISCUSSION OF FINDINGS

This section discusses the analysis from the findings that were derived from Table 1 and Table 2. First, the analysis examined the alleged fraud and mismanagement incidents with their corresponding contract life cycle phases of the Contract Management Standard (CMS). Then, the analysis examined the alleged fraud and mismanagement incidents with the corresponding internal control components. Next, the analysis examined the alleged fraud and mismanagement incidents with the corresponding procurement schemes. Finally, the analysis examined the mismanagement incidents with the corresponding mismanagement categories.

1. Contract Management Standard Life Cycle

Each alleged fraud and mismanagement incident was categorized into the Contract Management Standard Life Cycle. The contract life cycle includes three phases: the pre-award, award, and post-award. In this case, the majority of the alleged fraud and mismanagement incidents (13 out of 18) occurred in the post-award phase. This indicates that the post-award phase is the most vulnerable phase throughout this procurement case. The details of each corresponding phase are presented next.

a. *Pre-Award Phase*

1. The Taiwan Infantry Fighting Vehicle Case (TIFV) marked a national defense and security milestone by building the indigenous weapon. Given the high budget, the importance, and the complexity of the nature of the case, the procurement method should not use the lowest tender but instead the most advantageous tender is the most suitable choice because it ensures the quality of the end items meet standard. (Refer to Table 1/ MND 1).
2. The Ministry of National Defense failed to adequately set the procurement price benchmarks (the government estimate) based on the past bids, government database, and market survey data. The budget for procuring the “Chassis and Power-train System” of TIFV was U.S. \$242 million, but



the winning bid was only U.S. \$148 million. The report highlighted that there was a huge gap of U.S. \$94 million, which was around 62% of the government estimate. (Refer to Table 1/ MND 2).

3. In 2012, MND conducted an open tender of “Chassis and Power-chain System” of TIFV with a budget of U.S. \$242 million for 326 units. The winning bidder would also be eligible to participate in the “limited tendering procedures” for an additional 334 units. In an attempt to obtain the anticipated benefits from the contract and its subsequent expansion project, two companies conveyed the intention to cooperate with Chung-Hsin Co. The three companies signed a joint cooperation agreement to win the tender. (Refer to Table 2/ CH 1).
4. During the initial research and development phase of TIFV, MND worked with the Industrial Technology Research Institute (ITRI) to manufacture 28 prototypes. The IP of the blueprint of the engineering design drawings and maintenance tools belonged to ITRI and valued U.S. \$3 million. Chung-Hsin Co. and other colluded subcontractors secretly reached out to two technicians of the ITRI and deliberated to get the blueprint in exchange of their future position in Chung-Hsin Co. and the profit of U.S. \$ 10 thousand per delivered vehicle as technical service fees. By acquiring the proprietary design data before the solicitation phase, Chung-Hsin Co. gained an unfair competitive advantage over other potential bidders and was able to tailor its proposal to align precisely with the technical requirements. This incident constituted a clear form of bid rigging that undermined the integrity of the procurement process. The two technicians accepted the offer and emailed all the blueprint and design drawings. The exchange of future employment and financial benefit for privileged information also represented a conflict of interest, as the ITRI technicians violated their fiduciary duties to the government. Nevertheless, the dominant nature of this misconduct lies in bid rigging, since the premature



access to controlled design information directly distorted fair competition during the bidding phase. (Refer to Table 2/ CH 2).

The pre-award phase includes developing a buying strategy from the buyer's side and developing a selling strategy from the seller's side (NCMA & WorldCC, 2025). This phase serves as the basis of the entire procurement process, and the outcome will directly influence the next two phases. In this case, both of the incidents related to MND occurred in the pre-award phase, which created a loophole through which contractors could take advantage. The MND's selection of the lowest tender method and their failure of setting the adequate government estimate gave way to conditions that enabled fraud. Although no justification could rationalize and legitimize the act of committing fraud, the tenderers chose to engage in collusion, while the price was the critical criterion for awarding this complex contract. Both of the behaviors related to Chung-Hsin Co. and the subcontractors heightened a significant weakness in the design and oversight of government procurement.

b. Award Phase

According to Taiwan's Government Procurement Law Article 70, the contractor shall not subcontract the principal portion of the contract. Subcontracting of any part shall require prior approval from procuring entity. This policy is to ensure the quality of the goods and the materials and sources of the goods are reliable. During the investigation of the TIFV case, prosecutors discovered that Chung-Hsin Co. had secretly subcontracted major work packages to over six firms, many of which had previously been involved in at least thirteen fraudulent bidding incidents. Through this concerted collusion, the parties created a façade of open competition while ensuring that the contract award and subsequent subcontracts would obtain improper financial benefits. Although the scheme also demonstrated elements of bid rigging, as the bidders jointly orchestrated and falsified the bidding process, the dominant nature of this misconduct is collusion, since multiple firms conspired to deceive the government and share the illicit gains under a coordinated arrangement. (Refer to Table 1/ MND 3).

The award phase includes the process of forming contracts, and there are four more processes under forming contracts: evaluate offer, prepare for negotiations, conduct



negotiations, and award contract. In this case, the mismanagement incident occurred during the evaluating offer process. It is important to note that during the evaluating offer process the Taiwan Procurement Act provides guidance for assessing the low award price, which is the mechanism to “double check” if the award winner is responsible and to ensure the completion and the quality of the procurement (Government Procurement Act, 2019). However, the MND still failed to evaluate the offer correctly even with the mechanism. This failure directly triggered the subsequent activities that later led to a series of fraud and mismanagement incidents in the post-award phase.

c. Post-Award Phase

1. A civilian employee at the 209th Arsenal of Armaments Bureau received a bribe of approximately U.S. \$40,000 from one of the subcontractors under the guise of “introduction fee.” He introduced three other civilian employees to work at the factories of the subcontractors to carry out the welding of the upper and lower fuel tanks. Their actions violated the regulation of prohibition for government employees to work part-time jobs. (Refer to Table 1/ MND 4).
2. The civilian employee who received the bribe from one of the subcontractors and worked at the 209th Arsenal of Armaments Bureau, was responsible for the management of the inventory. The work included receiving, inspection, delivery inspection, allocation, and storage of the military equipment. He assisted the subcontractor to accelerate the inspection procedures and cover the potential delay penalties. During the 7th batch of the delivery period, the subcontractor could not meet the deadline of June 15, 2014 to deliver the items due to the import process. To avoid the delay fine of U.S. \$ 18,000, the subcontractor asked the civilian employee to take out the items from the 6th batch of goods that were delivered and mixed them into the 7th batch to be inspected. (Refer to Table 1/ MND 5).



3. The subcontractor entered the inventory with the civilian employee without registration and accomplished the adulteration event by changing the labels and facilitated the inspection together. (Refer to Table 1/ MND 6).
4. The task of managing the inventory lacked a cross-supervision mechanism. If there had existed an acting officer to co-manage, it is likely that the situation of swapping the inspection goods might not have happened. (Refer to Table 1/ MND 7).
5. The involvement of this case was mostly civilian government employees in the MND. This indicated that there existed significant insufficient legal and ethical education at the grassroots level. (Refer to Table 1/ MND 8).
6. The governance oversight was weak and lacked the ability to detect fraudulent behaviors and financial irregularities. The leadership failed to effectively manage and supervise not only personnel evaluations, gate access control, and operational spot checks, but also the acceptance and verification of delivered items. This weak oversight of the quality checking process impaired transparency and accountability, allowing financial losses and mismanagement incidents to go unnoticed. To prevent recurrence, fraud prevention should be implemented in daily management and at every level of the unit. (Refer to Table 1/ MND 9).
7. According to Taiwan's Government Procurement Law Article 70, the contractor shall not subcontract the principal portion of the contract. Subcontracting of any part shall require prior approval from the procuring entity. This policy is to ensure that the quality of the goods and the materials and sources of the goods are reliable. During the investigation of the TIFV procurement case, prosecutors discovered that Chung-Hsin Co. had secretly subcontracted major work packages to over six firms, many of which had previously been involved in at least thirteen fraudulent bidding incidents. Through this concerted collusion, the parties created a



façade of open competition while ensuring that the contract award and subsequent subcontracts would obtain improper financial benefits.

Although the scheme also demonstrated elements of bid rigging, as the bidders jointly orchestrated and falsified the bidding process, the dominant nature of this misconduct is collusion, since multiple firms conspired to deceive the government and share the illicit gains under a coordinated arrangement. (Refer to Table 2/ CH 3).

8. The subcontractor issued “delivery notes” (invoices) for welding work more than once for the same job that enabled welders introduced by the civilian employee at 209 Arsenal to claim payment. The subcontractor manipulated the accounting records and submitted the fake invoices to the Chung-Hsin Co. to exploit the profit. (Refer to Table 2/ CH 4).
9. After providing a bribe of U.S. \$40 thousand to the civilian employee at the 209 Arsenal, the subcontractor asked the employee to assist passing the delivery of goods. To cover up the delay of the goods, the subcontractor went to the inventory and changed the label of delivery date. (Refer to Table 2/ CH 5).
10. In the tender documents, the regulation clearly stated that all the parts used in this case should not be manufactured in China due to the goal and policy of building indigenous weapons and also the consideration of the national security. The contractors willfully and knowingly violated this regulation to reduce cost and provided substandard parts. (Refer to Table 2/ CH 6).
11. In order to cover up the fact of using parts from China, the contractors established a shell company to execute origin laundering. (For example, in the AEY case, the contractor substituted the outdated ammunition from China by changing the labels of the package). In this case, the contractors purchased the parts from China and handled customs clearance for importation by issuing invoices, packing lists, and import declarations



through the shell company established in Anguilla, West Indies. Finally, the goods were imported through the subcontractor's company and delivered from the main contractor. (Refer to Table 2/ CH 7).

12. During the investigation, the prosecutor also found out that the subcontractors imported used parts from a Thailand manufacturer at a low cost, refurbished them, and delivered as new. (Refer to Table 2/ CH 8).
13. In order to conceal the use of defective and non-compliant parts, the subcontractors conspired with the inspection company to issue falsified inspection certificates and fabricated quality reports that falsely indicated all delivered components met contractual and technical specifications. These deceptive documents were deliberately submitted to misrepresent the true condition of the equipment and secure payment under false pretenses. (Refer to Table 2/ CH 9).

The post-award phase includes performing contract and closing out contract. In this case, all the alleged fraud and mismanagement incidents occurred during the performing contract process. The process includes fulfilling contract, ensuring quality, managing subcontractors, and governing contracts. After MND awarded Chung-Hsin Co. the contract, the company gradually exposed the inability to fulfill their contract. Their inability to perform the contract likely motivated them to conduct the alleged fraud and mismanagement incidents. The acts of Chung-Hsin Co. and other subcontractors led to the termination of the contract and several lawsuits and disputes.

2. Internal Control Component

Each of the alleged fraud and mismanagement incidents were categorized into the internal control component of the COSO Internal Control Integrated Framework. In this case, the majority of the alleged fraud and mismanagement incidents (10 out of 18) occurred due to the lack of the component of control environment. The details of each corresponding internal control component are presented next.



a. *Control Environment*

1. The involvement of this case was mostly civilian government employees in the MND. This indicated that there existed significant insufficient legal and ethical education at the grassroots level. (Refer to Table 1/ MND 8).
2. The governance oversight was weak and lacked the ability to detect fraudulent behaviors and financial irregularities. The leadership failed to effectively manage and supervise not only personnel evaluations, gate access control, and operational spot checks, but also the acceptance and verification of delivered items. This weak oversight of the quality checking process impaired transparency and accountability, allowing financial losses and mismanagement incidents to go unnoticed. To prevent recurrence, fraud prevention should be implemented in daily management and at every level of the unit. (Refer to Table 1/ MND 9).
3. In 2012, MND conducted an open tender of “Chassis and Power-chain System” of TIFV with a budget of U.S. \$242 million for 326 units. The winning bidder would also be eligible to participate in the “limited tendering procedures” for an additional 334 units. In an attempt to obtain the anticipated benefits from the contract and its subsequent expansion project, two companies conveyed the intention to cooperate with Chung-Hsin Co. The three companies signed a joint cooperation agreement to win the tender. (Refer to Table 2/ CH 1).
4. During the initial research and development phase of TIFV, MND worked with the Industrial Technology Research Institute (ITRI) to manufacture 28 prototypes. The IP of the blueprint of the engineering design drawings and maintenance tools belonged to ITRI and valued U.S. \$3 million. Chung-Hsin Co. and other colluded subcontractors secretly reached out to two technicians of the ITRI and deliberated to get the blueprint in exchange of their future position in Chung-Hsin Co. and the profit of U.S. \$ 10 thousand per delivered vehicle as technical service fees. By acquiring



the proprietary design data before the solicitation phase, Chung-Hsin Co. gained an unfair competitive advantage over other potential bidders and was able to tailor its proposal to align precisely with the technical requirements. This incident constituted a clear form of bid rigging that undermined the integrity of the procurement process. The two technicians accepted the offer and emailed all the blueprint and design drawings. The exchange of future employment and financial benefit for privileged information also represented a conflict of interest, as the ITRI technicians violated their fiduciary duties to the government. Nevertheless, the dominant nature of this misconduct lies in bid rigging, since the premature access to controlled design information directly distorted fair competition during the bidding phase. (Refer to Table 2/ CH 2).

5. The subcontractor issued “delivery notes” (invoices) for welding more than once for the same job that enabled welders introduced by the civilian employee at the 209 Arsenal to claim payment. The subcontractor manipulated the accounting records and submitted the fake invoices to the Chung-Hsin Co. to exploit the profit. (Refer to Table 2/ CH 4).
6. After providing a bribe of U.S. \$40 thousand to the civilian employee at the 209 Arsenal, the subcontractor asked the employee to assist passing the delivery of goods. To cover up the delay of the goods, the subcontractor went to the inventory and changed the label of delivery date. (Refer to Table 2/ CH 5).
7. In the tender documents, the regulation clearly stated that all the parts used in this case should not be manufactured in China due to the goal and policy of building indigenous weapons and also the consideration of the national security. The contractors willfully and knowingly violated this regulation to reduce cost and provided substandard parts. (Refer to Table 2/ CH 6).



8. In order to cover up the fact of using parts from China, the contractors established a shell company to execute origin laundering. (For example, in the AEY case, the contractor substituted the outdated ammunition from China by changing the labels of the package). In this case, the contractors purchased the parts from China and handled customs clearance for importation by issuing invoices, packing lists, and import declarations through the shell company established in Anguilla, West Indies. Finally, the goods were imported through the subcontractor's company and delivered from the main contractor. (Refer to Table 2/ CH 7).
9. During the investigation, the prosecutor also found out that the subcontractors imported used parts from a Thailand manufacturer at a low cost, refurbished them, and delivered as new. (Refer to Table 2/ CH 8).
10. In order to conceal the use of defective and non-compliant parts, the subcontractors conspired with the inspection company to issue falsified inspection certificates and fabricated quality reports that falsely indicated all delivered components met contractual and technical specifications. These deceptive documents were deliberately submitted to misrepresent the true condition of the equipment and secure payment under false pretenses. (Refer to Table 2/ CH 9).

The COSO (2013) states that “the control environment comprises the integrity and ethical values of an organization” (p. 4) and is “the foundation for an internal control system” (GAO, 2014b, p. 21). In this case, both the employees within the MND and the employees in Chung-Hsin Co. did not adhere to the ethical values in their organization. However, while both organizations engaged in unethical behavior, MND's unethical behavior was limited to the lowest level of the organization, and the issues at Chung-Hsin Co. were systemic.

b. Risk Assessment

1. The Taiwan Infantry Fighting Vehicle (TIFV) Case marked a national defense and security milestone by building the indigenous weapon. Given



the high budget, the importance, and the complexity of the nature of the case, the procurement method should not use the lowest tender, but instead the most advantageous tender is the most suitable choice because it ensures the quality of the end items meet standard. (Refer to Table 1/ MND 1).

2. The Ministry of National Defense failed to adequately set the procurement price benchmarks (the government estimate) based on the past bids, government database, and market survey data. The budget for procuring the “Chassis and Power-train System” of TIFV was U.S. \$242 million, but the winning bid was only U.S. \$148 million. The report highlighted that there was a huge gap of U.S. \$94 million, which was around 62% of the government estimate. (Refer to Table 1/ MND 2).
3. MND failed to question the qualification of the contractor due to its low bid. According to Taiwan’s Government Procurement Act Article 58: “When a procuring entity conducts a procurement using the lowest bid award method, the bid price submitted by a tenderer shall not exceed the government estimate (the procurement price benchmarks). However, if the award price is less than eighty percent of the government estimate, the procuring entity shall require the tenderer to provide a cost analysis or other supporting documents, and only after reviewing and confirming that the price is reasonable may the award be made” (Government Procurement Act, 2019). Although the MND asked the tenderer to submit the cost analysis for this case, but the MND reviewed the analysis and decided that there was no unreasonableness and that the reduced cost posed no risk to the quality and ability to perform the contract. (Refer to Table 1/ MND 3).

In this case, the MND failed to comprehensively assess the risks by not choosing the better procurement method, not setting the government estimate, and not verifying the qualification of the award winner. From the beginning, the MND exposed itself to the



potential risk of fraud, and the lack of mitigation opened a loophole and opportunity for the fraudulent activities.

c. Control Activities

According to Taiwan's Government Procurement Law Article 70, the contractor shall not subcontract the principal portion of the contract. Subcontracting of any part shall require prior approval from the procuring entity. This policy is to ensure that the quality of the goods and the materials and sources of the goods are reliable. During the investigation of the TIFV procurement case, prosecutors discovered that Chung-Hsin Co. had secretly subcontracted major work packages to over six firms, many of which had previously been involved in at least thirteen fraudulent bidding incidents. Through this concerted collusion, the parties created a façade of open competition while ensuring that the contract award and subsequent subcontracts would obtain improper financial benefits. Although the scheme also demonstrated elements of bid rigging, as the bidders jointly orchestrated and falsified the bidding process, the dominant nature of this misconduct is collusion, since multiple firms conspired to deceive the government and share the illicit gains under a coordinated arrangement. (Refer to Table 2/ CH 3).

The COSO (2013) explains that “control activities are the actions established through policies to ensure the mitigation of risks and the achievement of objectives” (p. 4). In this case, the subcontractors had constantly been involved in fraudulent activities in the past but there was no regulation or procedure to prohibit them to perform the government contracts afterwards. The absence of the policy not only had a negative impact in this case, but could also enable the cycle of repetition of fraud in the future.

d. Information and Communication

In this case, no alleged fraud or mismanagement incidents occurred due to the lack of information and communication component.

e. Monitoring Activities

1. A civilian employee at the 209th Arsenal of Armaments Bureau received a bribe of approximately U.S. \$40,000 from one of the subcontractors under



the guise of “introduction fee.” He introduced three other civilian employees to work at the factories of the subcontractors to carry out the welding of the upper and lower fuel tanks. Their actions violated the regulation of prohibition for government employees to work part-time jobs. (Refer to Table 1/ MND 4).

2. The civilian employee who received the bribe from one of the subcontractors and worked at the 209th Arsenal of Armaments Bureau, was responsible for the management of the inventory. The work included receiving, inspection, delivery inspection, allocation, and storage of the military equipment. He assisted the subcontractor to accelerate the inspection procedures and cover the potential delay penalties. During the 7th batch of the delivery period, the subcontractor could not meet the deadline of June 15, 2014 to deliver the items due to the import process. To avoid the delay fine of U.S. \$ 18,000, the subcontractor asked the civilian employee to take out the items from the 6th batch of goods that were delivered and mixed them into the 7th batch to be inspected. (Refer to Table 1/ MND 5).
3. The subcontractor entered the inventory with the civilian employee without registration and accomplished the adulteration event by changing the labels and facilitated the inspection together. (Refer to Table 1/ MND 6).
4. The task of managing the inventory lacked a cross-supervision mechanism. If there had existed an acting officer to co-manage, it is likely that the situation of swapping the inspection goods might not have happened. (Refer to Table 1/ MND 7).

The Monitoring Activities component is to assess the quality of internal controls. In this case, the absence of a supervision mechanism made the process of performing contract vulnerable. Without continuous oversight, deviations from expected performance



went undetected, which created opportunities for non-compliance, inefficiencies, and the fraudulent behavior and mismanagement incidents.

3. Procurement Fraud Scheme

Each alleged fraud incident was categorized into its related Procurement Fraud Scheme. In this case, 11 alleged fraud incidents were identified. The details of each corresponding fraud incident are presented next.

a. Collusion

1. A civilian employee at the 209th Arsenal of Armaments Bureau received a bribe of approximately U.S. \$40,000 from one of the subcontractors under the guise of “introduction fee.” He introduced three other civilian employees to work at the factories of the subcontractors to carry out the welding of the upper and lower fuel tanks. Their actions violated the regulation of prohibition for government employees to work part-time jobs. (Refer to Table 1/ MND 4).
2. According to Taiwan’s Government Procurement Law Article 70, the contractor shall not subcontract the principal portion of the contract. Subcontracting of any part shall require prior approval from the procuring entity. This policy is to ensure that the quality of the goods and the materials and sources of the goods are reliable. During the investigation of the TIFV procurement case, prosecutors discovered that Chung-Hsin Co. had secretly subcontracted major work packages to over six firms, many of which had previously been involved in at least thirteen fraudulent bidding incidents. Through this concerted collusion, the parties created a façade of open competition while ensuring that the contract award and subsequent subcontracts would obtain improper financial benefits. Although the scheme also demonstrated elements of bid rigging, as the bidders jointly orchestrated and falsified the bidding process, the dominant nature of this misconduct is collusion since multiple firms conspired to



deceive the government and share the illicit gains under a coordinated arrangement. (Refer to Table 2/ CH 3).

3. After providing a bribe of U.S. \$40,000 to the civilian employee at the 209 Arsenal, the subcontractor asked the employee to assist passing the delivery of goods. To cover up the delay of the goods, the subcontractor went to the inventory and changed the label of delivery date. (Refer to Table 2/ CH 5).

Collusion is “an agreement to defraud another or obtain something forbidden by law” (*Black’s Law Dictionary*, 2004). The common examples of collusion include *Bribes and Kickbacks* and *Spilt Purchases*. Both of these examples occurred during the Taiwan TIFV case. The *Bribes and Kickbacks* occurred when the contractors offered the money to the government civilian employees. Then these employees provided assistance to accelerate the process of manufacturing the end item and the inspection process by covering up the delay of delivery. Moreover, spilt purchases occurred where the contractor coordinated interests with additional subcontractors to obtain improper profits by splitting purchases.

b. *Conflict of Interest*

In this case, no alleged fraud occurred due to conflict of interest.

c. *Bid Rigging*

1. In 2012, MND conducted an open tender of “Chassis and Power-chain System” of TIFV with a budget of U.S. \$242 million for 326 units. The winning bidder would also be eligible to participate in the “limited tendering procedures” for an additional 334 units. In an attempt to obtain the anticipated benefits from the contract and its subsequent expansion project, two companies conveyed the intention to cooperate with Chung-Hsin Co. The three companies signed a joint cooperation agreement to win the tender. (Refer to Table 2/ CH 1).



2. During the initial research and development phase of TIFV, MND worked with the Industrial Technology Research Institute (ITRI) to manufacture 28 prototypes. The IP of the blueprint of the engineering design drawings and maintenance tools belonged to ITRI and valued U.S. \$3 million. Chung-Hsin Co. and other colluded subcontractors secretly reached out to two technicians of the ITRI and deliberated to get the blueprint in exchange of their future position in Chung-Hsin Co. and the profit of U.S. \$ 10 thousand per delivered vehicle as technical service fees. By acquiring the proprietary design data before the solicitation phase, Chung-Hsin Co. gained an unfair competitive advantage over other potential bidders and was able to tailor its proposal to align precisely with the technical requirements. This incident constituted a clear form of bid rigging that undermined the integrity of the procurement process. The two technicians accepted the offer and emailed all the blueprint and design drawings. The exchange of future employment and financial benefit for privileged information also represented a conflict of interest, as the ITRI technicians violated their fiduciary duties to the government. Nevertheless, the dominant nature of this misconduct lies in bid rigging, since the premature access to controlled design information directly distorted fair competition during the bidding phase. (Refer to Table 2/ CH 2).

J. Rendon and R. Rendon (2015b) explain that “bid rigging involves exploitation of the bidding process by falsifying information” (p. 8). In this TIFV procurement case, the contractors first committed bid suppression when they decided that out of several contractors only Chung-Hsin Co. would bid on the contract. Next, to ensure that Chung-Hsin Co. was awarded the contract, they acquired the blueprints for TIFV through unjust means to gain an unfair competitive advantage.

d. Billing, Cost, and Pricing Schemes

The subcontractor issued “delivery notes” (invoices) for welding work more than once for the same job that enabled welders introduced by the civilian employee at the 209



Arsenal to claim payment. The subcontractor manipulated the accounting records and submitted the fake invoices to the Chung-Hsin Co. to exploit the profit. (Refer to Table 2/ CH 4).

According to J. Rendon and R. Rendon (2015b, p. 9), “billing, cost, or pricing type fraud schemes involve a misrepresentation of financial information as well as intentionally mischarging.” In this case, the subcontractor used false invoices and defective pricing to reduce the costs and to bribe the employee.

e. Fraudulent Purchases

In this case, no alleged fraud occurred due to conflict of interest.

f. Fraudulent Representations

1. The subcontractor entered the inventory with the civilian employee without registration and accomplished the adulteration event by changing the labels and facilitated the inspection together. (Refer to Table 1/ MND 6).
2. In the tender documents, the regulation clearly stated that all the parts used in this case should not be manufactured in China due to the goal and policy of building indigenous weapons and also the consideration of the national security. The contractors willfully and knowingly violated this regulation to reduce cost and provided substandard parts. (Refer to Table 2/ CH 6).
3. In order to cover up the fact of using parts from China, the contractors established a shell company to execute origin laundering. (For example, in the AEY case, the contractor substituted the outdated ammunition from China by changing the labels of the package). In this case, the contractors purchased the parts from China and handled customs clearance for importation by issuing invoices, packing lists, and import declarations through the shell company established in Anguilla, West Indies. Finally,



the goods were imported through the subcontractor's company and delivered from the main contractor. (Refer to Table 2/ CH 7).

4. During the investigation, the prosecutor also found out that the subcontractors imported used parts from a Thailand manufacturer at a low cost. The subcontractors then refurbished these parts and delivered as new. (Refer to Table 2/ CH 8).
5. In order to conceal the use of defective and non-compliant parts, the subcontractors conspired with the inspection company to issue falsified inspection certificates and fabricated quality reports that falsely indicated all delivered components met contractual and technical specifications. These deceptive documents were deliberately submitted to misrepresent the true condition of the equipment and secure payment under false pretenses. (Refer to Table 2/ CH 9).

J. Rendon and R. Rendon (2015b) explain that fraudulent representation involves falsely and intentionally misrepresenting goods and services. Common examples of *Fraudulent Representation* include failure to meet contract specifications and product substitution. In this TIFV procurement case, both of the scenarios occurred. Failure to meet contract specifications occurred when the contractors used the parts from China which were non-compliant to the contract. Product substitution occurred when the contractors used the deficient parts from China and Thailand.

4. Mismanagement Categories

Each mismanagement incident was categorized into its related Mismanagement Category. In this TIFV procurement case, 7 mismanagement incidents were identified. The details of each corresponding category are presented next.

a. Financial Mismanagement

The governance oversight was weak and lacked the ability to detect fraudulent behaviors and financial irregularities. The leadership failed to effectively manage and supervise not only personnel evaluations, gate access control, and operational spot checks,



but also the acceptance and verification of delivered items. This weak oversight of the quality checking process impaired transparency and accountability, allowing financial losses and mismanagement incidents to go unnoticed. To prevent recurrence, fraud prevention should be implemented in daily management and at every level of the unit. (Refer to Table 1/ MND 9).

Financial mismanagement includes the misuse or misappropriation of funds, poor financial planning and oversight, and a lack of internal controls. In this case, the MND failed to oversee and detect the fraud due to inadequate auditing mechanisms. This example highlights how MND's failure to adequately manage both personnel and equipment storage, which can both be viewed as government assets, aligns with poor financial planning and oversight.

b. Operational Mismanagement

1. The Taiwan Infantry Fighting Vehicle (TIFV) Case marked a national defense and security milestone by building the indigenous weapon. Given the high budget, the importance, and the complexity of the nature of the case, the procurement method should not use the lowest tender but instead the most advantageous tender is the most suitable choice because it ensures the quality of the end items meet standard. (Refer to Table 1/ MND 1).
2. The Ministry of National Defense failed to adequately set the procurement price benchmarks (the government estimate) based on the past bids, government database, and market survey data. The budget for procuring the "Chassis and Power-train System" of TIFV was U.S. \$242 million, but the winning bid was only U.S. \$148 million. The report highlighted that there was a huge gap of U.S. \$94 million, which was around 62% of the government estimate. (Refer to Table 1/ MND 2).
3. MND failed to question the qualification of the contractor due to its low bid. According to Taiwan's Government Procurement Act Article 58: "When a procuring entity conducts a procurement using the lowest bid



award method, the bid price submitted by a tenderer shall not exceed the government estimate (the procurement price benchmarks). However, if the award price is less than eighty percent of the government estimate, the procuring entity shall require the tenderer to provide a cost analysis or other supporting documents, and only after reviewing and confirming that the price is reasonable may the award be made” (Government Procurement Act, 2019). Although the MND asked the tenderer to submit the cost analysis for this case, but the MND reviewed the analysis and decided that there was no unreasonableness and that the reduced cost posed no risk to the quality and ability to perform the contract. (Refer to Table 1/ MND 3).

Operational mismanagement includes operational inefficiencies, inefficient processes and work flow, and poor resource allocation. The MND ignored the strategic importance and the complexity of the case and its reliance on the lowest tender method reflected a rigid and outdated procurement approach. Additionally, the MND failed to adequately set the government estimate, which increased the risk of performance failure and demonstrated inefficient processes. Moreover, the MND overlooked the red flags of the bid that was substantially below the government estimate, which caused operational inefficiencies.

c. Leadership and Strategic Mismanagement

1. The civilian employee who received the bribe from one of the subcontractors and worked at the 209th Arsenal of Armaments Bureau was responsible for the management of the inventory. The work included receiving, inspection, delivery inspection, allocation, and storage of the military equipment. He assisted the subcontractor to accelerate the inspection procedures and cover the potential delay penalties. During the 7th batch of the delivery period, the subcontractor could not meet the deadline of June 15, 2014 to deliver the items due to the import process. To avoid the delay fine of U.S. \$ 18,000, the subcontractor asked the



civilian employee to take out the items from the 6th batch of goods that were delivered and mixed them into the 7th batch to be inspected. (Refer to Table 1/ MND 5).

2. The task of managing the inventory lacked a cross-supervision mechanism. If there had been existed an acting officer to co-manage, it is likely that the situation of swapping the inspection goods might not have happened. (Refer to Table 1/ MND 7).

Leadership and strategic mismanagement include: a lack of clear vision, poor strategic planning, a lack of accountability, and a breach of public trust. In this case, the leadership failed to implement cross-functional checks and proper supervised mechanisms, which demonstrated the lack of clear vision. Additionally, poor strategic planning occurred when MND leadership neglected to appropriately monitor areas involving sensitive functions such as storage and inventory inspection points.

d. Legal and Ethical Mismanagement

No mismanagement incident in this TIFV procurement case was associated with the category of legal and ethical mismanagement.

e. Human Resources Mismanagement

The involvement of this TIFV procurement case was mostly civilian government employees in the MND. This indicated that there existed significant insufficient legal and ethical education at the grassroots level. (Refer to Table 1/ MND 8).

Human resources mismanagement includes: a lack of employee development, poor communication practices, and mistakes in employee classification. In this TIFV procurement case, the lack of adequate legal and ethical training and education for the civilian employees working within the military institutions demonstrated the lack of employee development. In order to build a more resilient and accountable environment, instilling the concept of compliance responsibilities and promoting fraud detection awareness to every level was essential.



f. Other Mismanagement

No mismanagement incident in this TIFV procurement case was associated with the category of other mismanagement.

D. SUMMARY OF FINDINGS

This section provides the summary of the findings, and the result from the findings will be presented through statistical graphs and charts.

1. Contract Management Standard Life Cycle

There are three phases in the contract life cycle: the pre-award, award, and post-award. In this case, the findings from Table 3 and Figure 7 suggest that the post-award phase is the most vulnerable phase from the contract life cycle. In total, there are 18 fraud and mismanagement incidents. Within these 18 incidents, 9 incidents are attributed to MND, and 9 incidents are attributed to Chung-Hsin Co. There are 4 incidents identified in the pre-award phase, one incident identified in the award phase, and 13 incidents identified in the post-award phase. Table 3 shows the number of alleged fraud and mismanagement incidents in the contract management framework. Figure 7 depicts the percentage of the alleged fraud and mismanagement incidents in the contract management life cycle.

Table 3. Number of Alleged Fraud and Mismanagement Incidents in Contract Management Life Cycle

Contract Life Cycle	Pre-Award	Award	Post-Award
Number of incidents	4	1	13
Responsible entity	MND (2) CH (2)	MND	MND (6) CH (7)
Percentage	22.2%	5.5%	72.2%



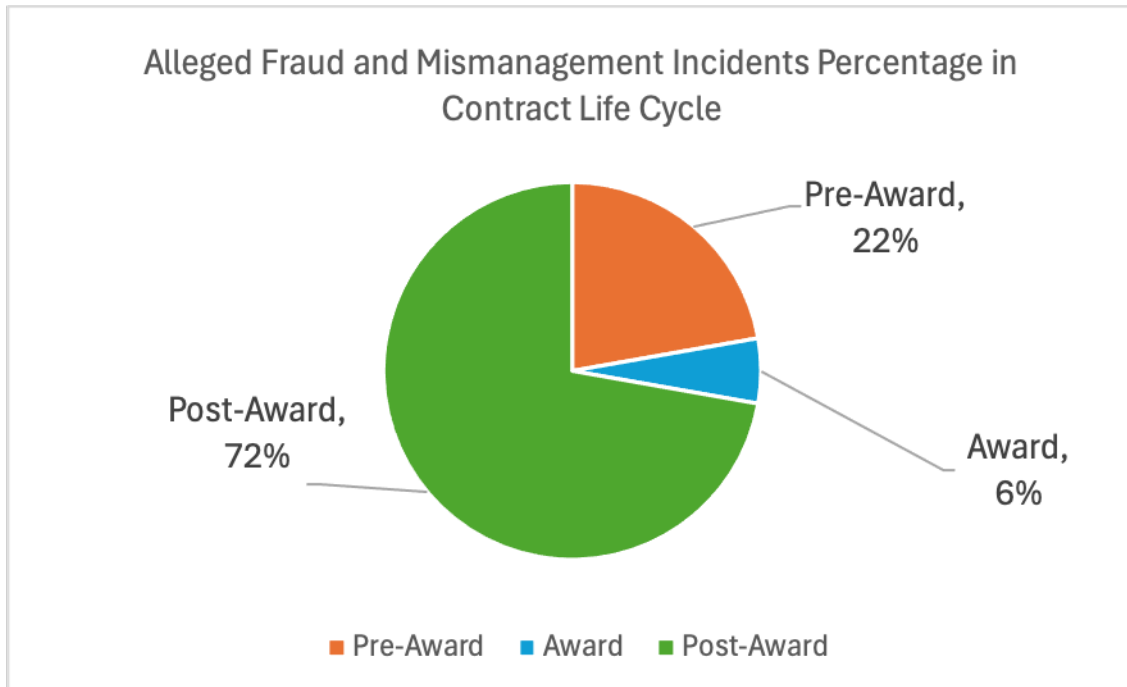


Figure 7. Alleged Fraud and Mismanagement Incidents in Contract Management Life Cycle

2. Internal Control Components

According to COSO, there are five internal control components in the Integrated Internal Control Framework: Control Environment, Risk Assessment, Control Activities, Information & Communication, and Monitoring Activities. In this TIFV procurement case, Table 4 and Figure 8 show that the Control Environment is the most vulnerable internal control component. Specifically, 10 incidents occurred due to the deficiencies in the Control Environment; 3 incidents occurred due to the deficiencies in the Risk Assessment; 1 incident occurred due to the deficiency in the Control Activities; 0 incidents occurred in the information and communication, and 4 incidents occurred due to the deficient Monitoring Activities. Table 4 shows the number of alleged fraud and mismanagement incidents in the internal control components. Figure 8 depicts the percentage of the alleged fraud and mismanagement incidents in the internal control components.

Table 4. Number of Alleged Fraud and Mismanagement Incidents in Internal Control Components

Internal Control Components	Control Environment	Risk Assessment	Control Activities	Information & Communication	Monitoring Activities
Number of incidents	10	3	1	0	4
Responsible entity	MND (2) CH (8)	CH (3)	CH (1)	N/A	MND (4)
Percentage	55.5%	16.6%	5.5%	0%	22.2%

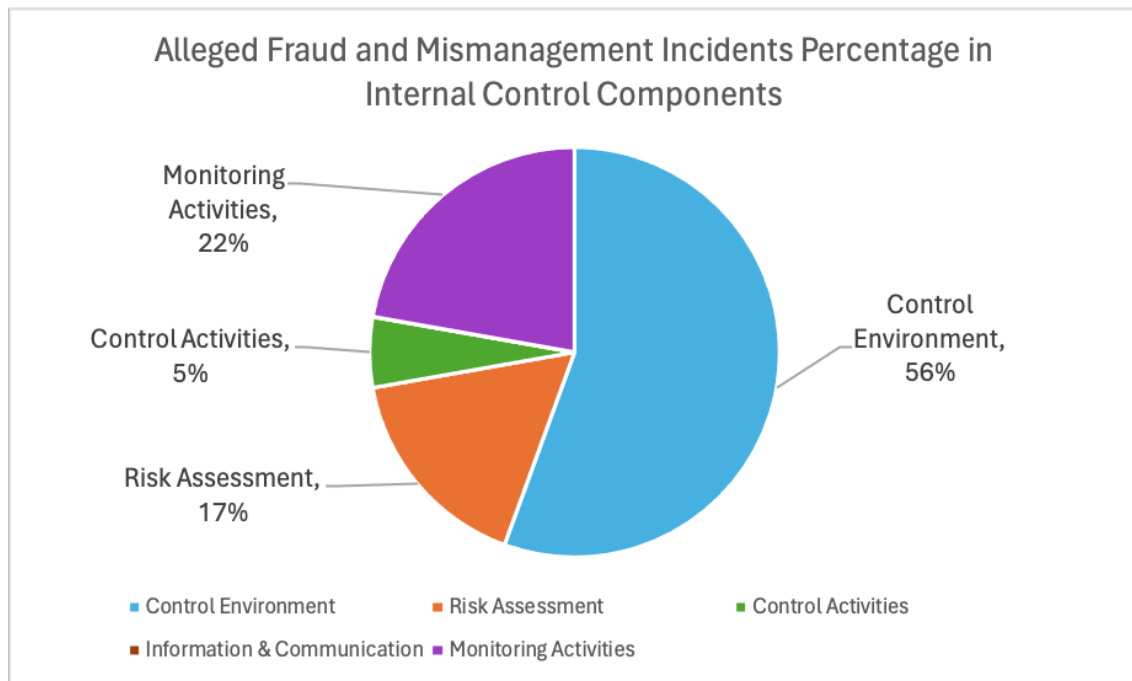


Figure 8. Alleged Fraud and Mismanagement Incidents in Internal Control Components

3. Procurement Fraud Scheme

Categories of Procurement Fraud Scheme includes: Collusion, Conflict of Interest, Bid Rigging, Billing, Cost, and Pricing Scheme, Fraudulent Purchases, and Fraudulent Representations (J. Rendon & R. Rendon, 2015b). In this case, Table 5 and Figure 9 show

the most common fraud type for the TIFV case is fraudulent representations. Table 5 shows the number of alleged frauds in the different categories of procurement fraud schemes. Figure 9 depicts the percentage of the alleged frauds in each of the procurement fraud scheme category. The findings from Table 5 and Figure 9 show that 3 alleged frauds were identified in the collusion category; 2 alleged frauds were identified as bid rigging; one is identified as billing/cost/pricing scheme, 0 alleged frauds were identified in the fraudulent purchases category, and 5 alleged frauds were identified as fraudulent representations.

Table 5. Number of Alleged Fraud in the Procurement Fraud Scheme

Procurement Fraud Scheme	Collusion	Conflict of Interest	Bid Rigging	Billing, Cost, and Pricing Scheme	Fraudulent Purchases	Fraudulent Representations
Number of Alleged Fraud	3	0	2	1	0	5
Responsible entity	MND (1) CH (2)	N/A	CH (2)	CH	N/A	MND (1) CH (4)
Percentage	27.2%	0%	18.1%	9%	0%	45.4%



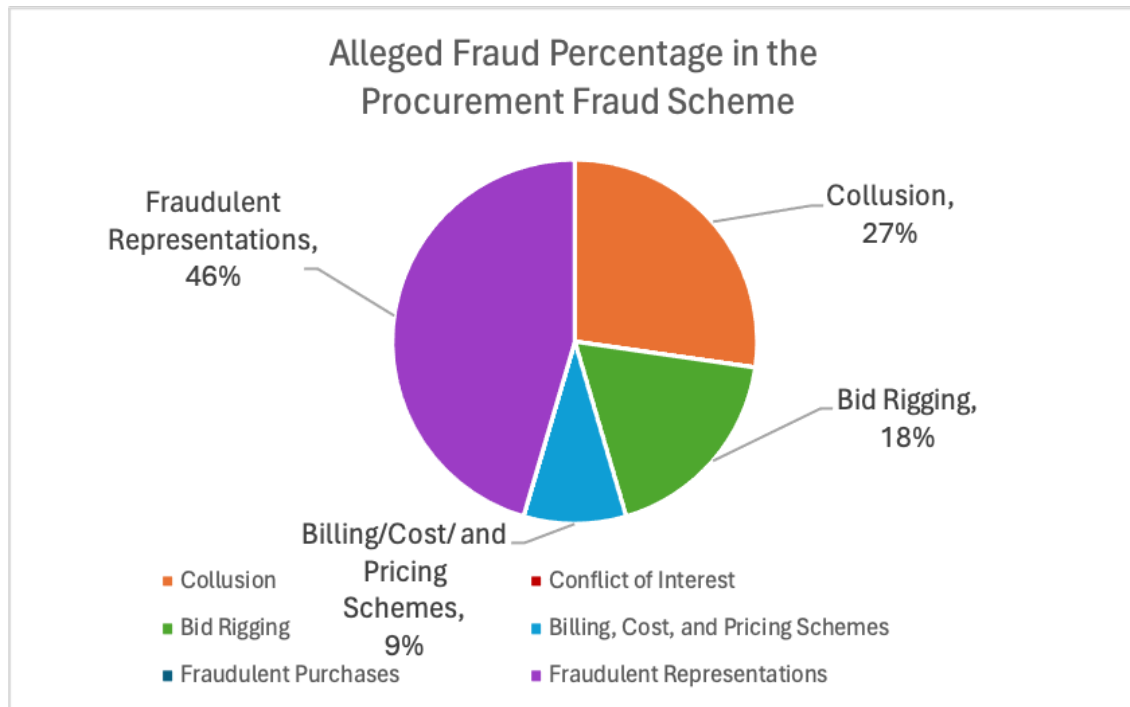


Figure 9. Alleged Fraud in the Procurement Fraud Scheme

4. Mismanagement Categories

The Mismanagement Categories include: Financial Mismanagement, Operational Mismanagement, Leadership/ Strategic Mismanagement, Legal/ Ethical Mismanagement, Human Resources Mismanagement, and Other Mismanagement. In this TIFV procurement case, Table 6 and Figure 10 show that operational mismanagement is the most frequently observed mismanagement category for the TIFV case. The findings from Table 6 and Figure 10 show that the incidents are categorized as follows: 1 incident is financial mismanagement; 3 incidents are operational mismanagement; 2 are leadership/ strategic mismanagement; 0 is legal/ethical mismanagement; 1 is human resources mismanagement, and 0 is other mismanagement. Table 6 shows the number of the mismanagement incidents in the mismanagement categories. Figure 10 depicts the percentage of the mismanagement incidents in the mismanagement categories.

Table 6. Number of Mismanagement Incidents in the Mismanagement Categories

Mismanagement Categories	Financial	Operational	Leadership/ Strategic	Legal/ Ethical	Human Resources	Other
Number of Alleged Fraud	1	3	2	0	1	0
Responsible entity	MND	MND (3)	MND (2)	N/A	MND	N/A
Percentage	14.2%	42.8%	28.5%	0%	14.2%	0%

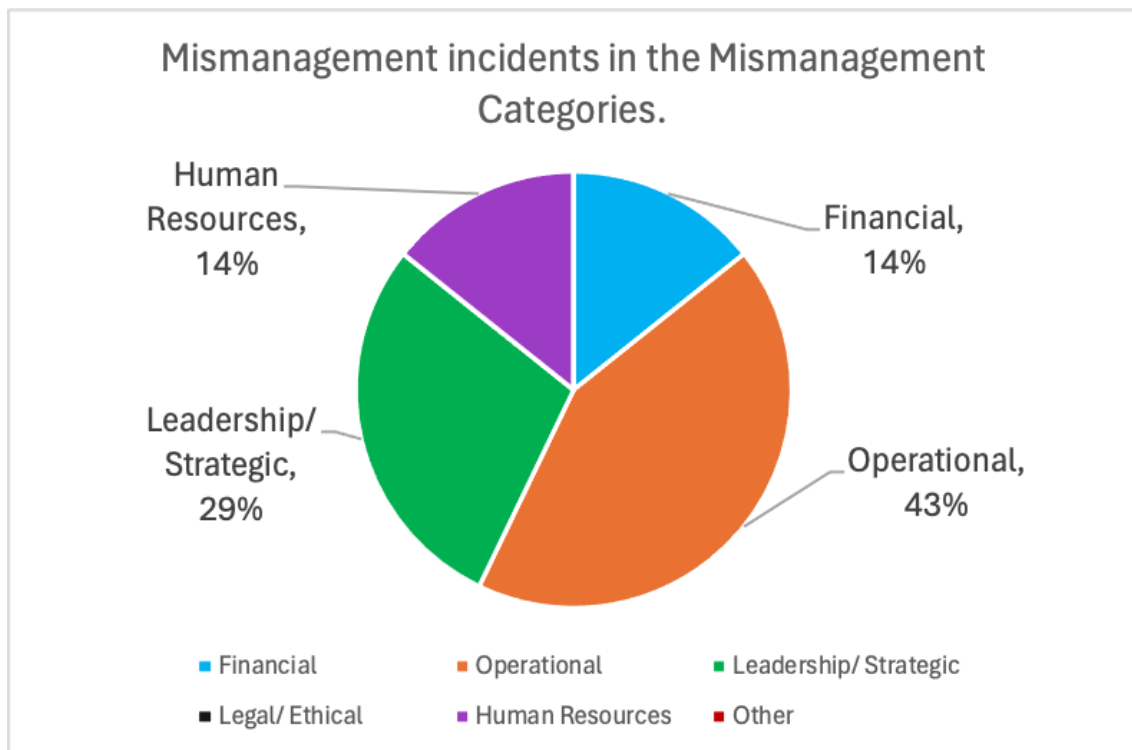


Figure 10. Mismanagement Incidents in Mismanagement Categories

E. IMPLICATIONS OF FINDINGS

The findings of this research indicate that the weaknesses observed in the TIFV procurement process are interconnected and systematic rather than isolated incidents. First,

the alleged fraud and mismanagement incidents reflect deficiencies that occurred across multiple processes of the contract life cycle, including the selection of procurement methods, contractor qualification reviews, internal control enforcement, and post-award supervision. These findings provide a direct foundation for the recommendations presented in the following section.

Second, the collusion and bid rigging incident during the pre-award and award phases imply that the integrity of competition was undermined at an early stage. The exchange of confidential information and coordinated bidding behavior among subcontractors broke market fairness and reduced transparency. This finding provides the foundation for the recommendation to establish clearer guidelines for selecting procurement methods, improve bidder qualification management, and adopt a stricter subcontractor vetting process to prevent coordination or manipulation among potential bidders.

Third, the recurring weaknesses in control activities and monitoring activities reveal a lack of the proper mechanisms to detect irregular incidents. The absence of effective oversight tools and insufficient coordination between auditing, contracting, and inspection units made the control system reactive rather than preventive. This insight supports the recommendation to enhance auditability by setting up standardized checklists, measurable performance indicators, and adding heavier penalties.

Finally, the findings show a persistent pattern of operational mismanagement stemming from weak leadership accountability, unclear roles, and insufficient training. These gaps hindered the integrity and the progress of procurement process. By enhancing personnel development and educational training programs, this may help to resolve the uneven knowledge and skill across every level of the contract life cycle.

F. RECOMMENDATIONS BASED ON FINDINGS

This section provides recommendations for how the Taiwan government can improve based on the findings of the Taiwan TIFV procurement case. This research presents five recommendations that are associated with the vulnerable areas of the contract life cycle phase, internal control components, procurement fraud scheme, and



mismanagement categories. These recommendations seek to eliminate gaps, strengthen the current frameworks, and develop more robust mechanisms to decrease risks and failures of future procurement cases.

1. Develop Guidelines and Standards for Selecting Procurement Methods

The Taiwan TIFV case was put at a high-risk position from the beginning of selecting the Lowest Tender procurement method, and this TIFV procurement case clearly demonstrated its consequences by the quality issues and the compliance failures. Although the Taiwan Government Procurement Act permits two kinds of methods: the Lowest Tender and the Most Advantageous Tender, the lack of standardized criteria for selecting them creates opportunities for inappropriate or inconsistent application and the risk of flawed decisions. Therefore, the development of guidelines and standards for selecting procurement methods would likely enable the alignment between the characteristics of the contract and the appropriate methods. The Government Procurement Act should set thresholds and specify the scenarios of when using the Most Advantageous Tender is appropriate. Additionally, procurement entities should document and justify the reason for their choice during the pre-award phase to ensure a more transparent and standardized procurement environment.

2. Strengthen Bid Qualification Vetting and Subcontractor Management

Although the findings from the Taiwan TIFV procurement case show that over half of the alleged fraud and mismanagement incidents occurred in the post-award phase, it is important to note that the root cause of these issues stem from the events that occurred during the *evaluate offer* process of the award phase. This distinction is important to note so that government entities can work to focus on improving the evaluating offer process, which will likely decrease the risk of procurement fraud. One of the most straightforward and transparent ways to filter out unscrupulous suppliers is to establish a clear “debarred list” mechanism. This kind of system can serve as an immediate reference to improve the efficiency and effectiveness of the evaluating offer process. In this case, although the subcontractors had repeated histories of fraudulent conduct in previous cases, they were



still able to participate due to the unsound debarment mechanism. The current debarment procedure must be initiated by the procuring entity, but many entities do not take action before the criminal verdicts are finalized. Often, these legal processes are lengthy and time-consuming, which delay the immediate administrative sanctioning of the disqualified suppliers. To prevent recurrence, the regulations should allow the interim suspension based on the indictment documents instead of the final court decision and simplify the reporting procedure.

3. Improve the Control Environment

In the Taiwan TIFV procurement case, more than half of the alleged fraud and mismanagement incidents occurred due to deficiencies in the Control Environment component of the internal control framework. In the Internal Control Integrated Framework, the control environment serves as the foundation throughout the overall effective internal control system. On one hand, the misconduct of the civilian employee within the MND represents the insufficient ethical and accountability at the grassroot level. On the other hand, the top-level leadership of the contractors deliberately decided to conduct prohibited behaviors such as bid rigging and misrepresentation of the product origins, which revealed the culture of prioritizing business interests over ethical integrity. To remedy the deficient control environment, the MND should focus on emphasizing ethics and compliance across all levels of procurement operations, instead of targeting only the contracting personnel. As for the contractors, building a constructive communication platform between the government and the suppliers to cultivate ethical corporate culture and trust-worthy relationships might eliminate misunderstanding and create a virtuous cycle and a win-win situation for both parts.

4. Strengthen Contract Performance Oversight and Enforcement Mechanisms

The lack of supervision and oversight is likely the main reason that the majority of alleged fraud and mismanagement incidents occurred in the Performing Contract process of the post award phase. To improve the oversight mechanisms, the government could establish phased performance audits at each milestone to execute quality sampling,



compliance checks, and technical certification especially for the focused and complex projects like the Taiwan TIFV procurement case. For the usual procurement cases without complications, implementing a dual accountability system with mutual checks and balances could strengthen procurement integrity and reduce the collusion opportunities. These audit methods should be put in place by building standardized checklists and measurable performance indicators to ensure fairness and consistency across different entities with different projects. Furthermore, enforcement mechanisms could improve by imposing heavier and timely penalties to create stronger deterrence.

5. Enhance Ethical and Legal Education for All Personnel throughout the Contract Life Cycle Phases

In the Taiwan TIFV procurement case, the majority of the unethical events were conducted by the civilian employees within the MND. The same situation takes place in the U.S. as discussed before in the literature review where one GAO report points out the lack of training for non-acquisition personnel who also perform acquisition-related functions (GAO, 2019). To address this problem, the MND could implement comprehensive training programs for all personnel throughout the contract life cycle phases. Example of the training programs could include: procurement law lessons, ethical decision-making workshops, contract management knowledge courses, past case studies, scenario-based exercises, and legal counseling. With adequate education, it is more likely that the personnel will be equipped to identify and mitigate the risk of committing fraud. Another recommendation is to build online learning platforms like the Defense Acquisition University (DAU) of the U.S. to carry the complete archive and resources to increase accessibility (Defense Acquisition University, n.d.-b). By fostering a culture of integrity and compliance, the MND can create a more sustainable framework that strengthens procurement ethics and reduces the likelihood of future misconduct.

G. SUMMARY

The purpose of this chapter was to present the findings and analysis of the Taiwan TIFV procurement case. First, the chapter introduced the database of the identified alleged fraud and mismanagement incidents in the investigation report. The findings included: a



description of which contract life cycle phases the alleged fraud and mismanagement incidents occurred in; which internal control components were deficient; and to which fraud schemes and mismanagement categories the incidents were aligned. Next, the chapter provided a discussion of the findings. The next section presented the implications of the findings. Then, the chapter provided recommendations based on the findings. Finally, this chapter ended with a brief summary. The following chapter discusses the summary, conclusions, and areas for future research.



V. SUMMARY, CONCLUSIONS, AND AREAS FOR FUTURE RESEARCH

A. INTRODUCTION

The purpose of this chapter is to present the summary of this research. First, the chapter begins with a brief summary of the research. Second, the chapter presents the conclusions while answering the research questions. Finally, the chapter presents the areas for future research.

B. SUMMARY

This research examined the Taiwan Infantry Fighting Vehicle (TIFV) procurement fraud case through the lens of auditability theory. The background of the study emphasized Taiwan's unique geopolitical position and its long-standing policy of defense self-reliance. While the TIFV program was intended to symbolize industrial progress and technological independence, the case ultimately revealed serious vulnerabilities within Taiwan's defense acquisition system. The incident involved extensive collaboration between private contractors and government officials, leading to multiple charges of bribery, collusion, and fraudulent representation.

The problem that motivated this research was the recurring nature of procurement fraud and its significant impact on national security and public trust. The investigation by the Control Yuan exposed how mismanagement and weak internal controls created a conducive environment to fraudulent behavior. The case proved how ineffective oversight, inadequate ethical culture, and insufficient risk assessment collectively contributed to both operational inefficiency and reputational harm.

The purpose of this study was to analyze the alleged fraud and mismanagement incidents in the TIFV case by aligning them with contract management processes, internal control components, and procurement fraud schemes. By applying the auditability theory, the research provided a framework to interpret how deficiencies in personnel competency, process capability, and internal control effectiveness as well as mismanagement issues enabled the fraud to occur.



Based on the findings and analysis, this research hopes to present contracting personnel with solutions to better conduct procurement operations and provide insights and recommendations for Taiwan MND to be aware of procurement fraud in the future.

C. CONCLUSIONS

According to the findings and analysis of the Taiwan TIFV procurement fraud case, this research presents the answers to the research questions.

1. In which contracting processes did the alleged fraud and the mismanagement incidents occur in the Taiwan TIFV procurement case?

In this case, the alleged fraud and the mismanagement incidents occur in all three phases of the contract life cycle. However, the majority of the alleged fraud and mismanagement incidents (13 out of 18) occurred in the post-award phase. This indicates that the post-award phase is the most vulnerable phase throughout this procurement case.

2. What internal controls were deficient that allowed the alleged fraud and the mismanagement incidents to occur in the Taiwan TIFV procurement case?

In this case, the majority of the alleged fraud and mismanagement incidents (10 out of 18) occurred due to the deficiencies in the control environment component.

3. What were the alleged procurement fraud schemes that happened in the TIFV procurement case?

In this case, 11 alleged fraud incidents were identified. Within the 11 alleged fraud incidents, four kinds of fraud schemes were categorized. Among the four fraud schemes, fraudulent representations had the highest percentage.

D. AREAS FOR FUTURE RESEARCH

This research only focused on the Taiwan Infantry Fighting Vehicle (TIFV) procurement case as a single-case study to demonstrate how procurement fraud and mismanagement incidents emerge within a defense acquisition environment. Thus, the



scope and limitations narrow generalizability of the findings to other programs or countries. Potential areas for further exploration are presented next.

First, future research may expand the analytical scope by conducting comparative case studies across different weapon system programs and military branches within Taiwan. The comparison could identify recurring fraud patterns or find out unique vulnerabilities among various acquisition entities. The comparison would also help the leadership to adjust regulations and prioritize reform efforts.

Second, since the post-award phase was identified as the most vulnerable process in this case, further research could conduct a comparative analysis of the process and regulations on the post-award phase between the United States and Taiwan. This comparison would provide valuable insights into how different procurement systems manage contract administration, subcontractor oversight, and quality assurance.

Third, future studies may conduct quantitative approach by developing measurable indicators for personnel competency, process capability, and internal control maturity. A data-driven evaluation model would help the entity to examine the effectiveness of anti-fraud policies and training programs.



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