

# Analysis of Occupational Safety and Health Management System Implementation (SMK3) at PT. PLN (Persero) UP3 South Makassar

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**Abstract.** *This research is qualitative and utilizes a descriptive approach. Data analysis techniques include data collection, data reduction, and data presentation. Three informants participated in this study: key informants, regular informants, and supporting informants. The results of this study indicate that PT PLN (Persero) UP3 Makassar Selatan has established policies related to OHS, the planning of the Occupational Safety and Health Management System has been implemented well due to the planning of procurement and construction of OHS facilities, the implementation of the OHS management system has been implemented well because the implementation of work always refers to the SOP set by the company, Measurement and Evaluation of OHS Management System is implemented well because internal monitoring and audits are always carried out by the OHS supervisor, Review and Improvement of OHS Management System has been implemented because there are always surprise inspections (sidak) carried out by the OHS supervisor to ensure the consistency of OHS implementation, and if there is a violation of procedures, sanctions will be given according to the company's internal regulations. In the implementation of the program there are obstacles, namely: the lack of human resources who are experts in the field of OHS and support related to funding. The conclusion of the implementation of OHS Management System at PT PLN (Persero) UP3 Makassar Selatan, there are several shortcomings The need for improvement in the implementation of inspections and evaluations of the implementation of the OHS Management System (SMK3) on an ongoing basis.*

**Keywords:** *Analysis, Implementation, Occupational Health and Safety Management System*

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## INTRODUCTION

Indonesia is entering an era of modernization that is driving rapid development in every sector. The Indonesian government is currently focusing on infrastructure development to support equitable development, which is key to improving the economic welfare of the Indonesian people (Napitupulu et al., 2024; Nugraha et al., 2020; Anggraini & Pratama, 2025). Therefore, increased productivity is essential for development in Indonesia. Indonesia is a developing country with a large number of companies. Nenonen & Vasara (2013) said that, the problems faced by companies are not dissimilar when it comes to employee safety.

A lack of concern from the company or employees for workplace safety and health can be a significant issue that impacts a company's progress. Occupational Safety and Health (OSH) is crucial for morale, legality, and financial well-being (Jain et al., 2018; Mixafenti et al., 2025). Companies are required to ensure that workers and others involved remain safe at all times (Jonathan & Mbogo, 2016). Every worker globally generally desires comfort and freedom from excessive distractions and pressure in their work. However, the demands of companies in the competitive industrial world result in increased workloads and high risks of workplace hazards for workers. Jobs with high workloads and high risk of danger can cause discomfort, anxiety, and even stress, which can negatively impact workers (Batara & Fachrin, 2023).

Occupational Safety and Health (K3), abbreviated as K3, provides protection for workers from workplace accidents or Occupational Diseases (PAK). Good and skilled workers are crucial in all activities because they determine whether an activity can run smoothly. In any production activity or process, workers are a crucial asset, alongside other elements such as production materials, machinery, and the work environment (Liyanage, 2007; Quinn et al., 1998). Therefore, to increase work productivity, workers must receive protection, guidance, and development (Asia, 2020).

Occupational Safety and Health (OSH) protects workers from occupational accidents or diseases. The workforce is a valuable company asset and, alongside other elements, is a crucial element in the production process. To increase productivity, the workforce must be maintained, nurtured, and developed (Karakhan et al., 2023). Valmohammadi & Shahrashoob (2022) said that, the workforce plays a crucial role and position as a development objective in the implementation of national development. In accordance with the workforce's role and position, workforce empowerment is necessary to improve the quality of the workforce and its role in development, as well as to enhance the protection of workers and their families in accordance with human dignity and worth.

Protection of the workforce is intended to guarantee the basic rights of workers and ensure equal opportunities and treatment without discrimination (Adams, 2016). Protection of the workforce is intended to guarantee the basic rights of workers and ensure equal opportunities and treatment without discrimination on any basis to ensure the welfare of workers and their families, while still taking into account developments in the business world. Industrialization, mechanization, electrification, and modernization, which are advancing every year, have had numerous impacts, such as increased work intensity and work tempo for workers (Iffah & Nurianti, 2023). Fatigue, inattention to other things, loss of balance, and other factors are all causes of accidents.

Workplace accidents are preventable because they do not occur spontaneously. According to Katsakiori et al. (2010) and Kang et al. (2022), A workplace accident will only occur if multiple causal factors occur simultaneously in a workplace or production process. Several studies indicate that a workplace accident does not occur by itself, but rather is caused by one or more causal factors simultaneously in a single incident (Mayandari & Inayah, 2023). Companies must be responsible for all aspects of their work environment. According to the Occupational Health and Safety Assessment Series (OHSAS) standards, OHS encompasses all conditions and factors that can impact the OHS of workers and others (contractors, suppliers, visitors, and guests) in the workplace (Reskiana, 2021).

Management that specifically regulates OHS implementation is necessary to implement OHS in the workplace. An Occupational Health and Safety Management System, commonly referred to as SMK3, is one component of an overall workplace management system. According to Government Regulation No. 50 of 2012, SMK3 is a management system designed to control risks associated with all work activities or processes, which ultimately leads to a safe and productive workplace. Development using both simple and advanced technology is always subject to the risk of workplace accidents. In 2017, the number of workplace accidents decreased compared to 2016, when 80,393 cases were recorded in Indonesia.

Furthermore, the number of companies implementing an OHS Management System increased by 69.1% compared to 2016, reaching 1,221 companies. Data from the Indonesian Social Security Agency (BPJS Ketenagakerjaan) indicates that there were 114,000 workplace accidents in 2019. This increase occurred in 2020. From January to October 2020, BPJS Ketenagakerjaan recorded 177,000 workplace accidents. These incidents are believed to be due to suboptimal implementation of Occupational Safety and Health (K3) in the workplace, including worker behavior that does not comply with Occupational Safety and Health standards (Unsafe Actions and Unsafe Conditions) (Samsir et al., 2023).

With the number of workplace accidents increasing annually, PT PLN (Persero) continues to reduce the company's accident rate. PLN even aims to achieve zero accidents among its employees by 2023. PT. PLN (Persero) will not hesitate to terminate employment if any of its employees fail to wear proper personal protective equipment. Furthermore, PLN has strict regulations for its partners. One of the requirements, to achieve the "Zero Accident" campaign, is to employ electrical safety and health experts.

PT PLN (Persero) UP3 Makassar, as a state-owned enterprise, provides electricity for the public. Electricity is a vital instrument in today's life, and almost all sectors require it. PT PLN (Persero) also operates in the production, transmission, and distribution of electricity; therefore, it must maintain and improve the service and quality of electricity provided to the public. To support this improved service, PT PLN (Persero), as the sole source of electricity in Indonesia, must provide excellent service and electricity quality to its customers, as service is a key indicator of a company's reputation (Aditya et al., 2023).

Quality service is a requirement that PT PLN (Persero) must fulfill for its customers. Providing quality service will make customers feel satisfied and appreciated (Markoni, 2015). PLN UP3 Makassar, which oversees six Customer Service Implementation Units, certainly requires an OHSMS to ensure company productivity and performance. Previous research conducted by (Fioh et al., 2021) on the implementation of the OHSMS at PT PLN Central Java and Yogyakarta found that the OHSMS is running well and in accordance with applicable regulations, and therefore requires continued improvement. Most importantly, the implementation of this OHSMS has had an impact or implications on employee work quality and productivity, although the current OHSMS assessment only achieved a score of 55%.

Furthermore, preliminary observations at PT PLN (Persero) UP3 Makassar Selatan revealed that four workplace accidents occurred within the three-year period (2020-2022). Workplace accidents experienced by these workers include: cutting wounds while cutting pipes for electrical installations, falling while cleaning electrical wiring. One of the machine workers experienced an occupational disease in the form of hearing loss due to prolonged exposure to noise. Additional information indicates that workers use Personal Protective Equipment (PPE) only for jobs considered heavy and high-risk, while those considered light and not high-risk do not use PPE.

## **METHODS**

This research is qualitative and uses a descriptive approach, with the hope that the problems discussed here can be clearly identified so that solutions and resolutions can be found. Research methods are generally defined as scientific methods for obtaining data for specific purposes and purposes. Research methods encompass several elements, each of which determines the success of the research implementation in addressing the problems presented in the research. The predetermined steps are determining the location and time of the research, determining the research object, determining the research tools and materials, determining the data collection method, and determining the data analysis technique. Data collection techniques are the most important step in research, as the primary goal of research is to obtain data.

## **Research Instruments**

The instruments used in this study were the researchers themselves, with the tools used being interview guides, notebooks, writing utensils, a recording device, and a camera. This research was conducted at PT. PLN (Persero) UP3 South Makassar, Jl. Letjen Hertasning No. 89, Tamalate, Rappocini, Bonto Makkio, Makassar District, Makassar City, South Sulawesi.

## **Informants**

Informants are also referred to as people within the research scope, meaning they can provide information or data regarding the situation and conditions of the object being studied. The selection of sources or informants for in-depth interviews was carried out by the researcher, who assumed specific roles and perceived knowledge and information regarding the research problem. These were relevant parties involved in carrying out their duties in implementing the occupational safety and health management system at PT. PLN (Persero) UP3 South Makassar. The informants in this study were: The key informant in this study was the Manager of PT. PLN (Persero) UP3 Makassar. The supporting informant in this study was the K3 supervisor. The regular informants in this study were office employees, field employees, and mechanical employees.

## **Data Sources**

The data sources for this research are the subjects from whom the data is obtained. In this study, there are two data sources: primary data sources and secondary data sources. Primary data in this study are data obtained from in-depth interviews with research informants. Secondary data in this study are data obtained from PT. PLN (Persero) UP3 South Makassar as supporting and complementary data and are used to obtain a comprehensive picture or specific parts of this research.

## **Data Collection Techniques**

This data collection technique uses data collection techniques classified into several data collection sources, commonly referred to as method triangulation. Denzin, in Burhan Bungin, classifies method triangulation into source triangulation, data method triangulation, and theory triangulation. Data source triangulation is used to check the reliability and validity of information obtained at different times and through different methods. This checking involves linking multiple sources to provide reliable information. Paton, in Burhan Bungin, provides steps for checking data validity through data source triangulation, namely: Comparing observational data with interview results, comparing what people say in public with what they relate personally, comparing what people say about the research situation with what they say all the time, Comparing one's circumstances and perspectives with the opinions and views of others, such as ordinary people, people with secondary or higher education, wealthy individuals, and government officials, Comparing interview results with the contents of related documents. Source triangulation also provides researchers with the opportunity to correct errors in data and information sources and can be used as a benchmark for determining whether the necessary data is sufficient. Researchers compare information or data using different methods. In this case, researchers use interview, observation, and documentation methods to obtain reliable, accurate information and a complete picture of the desired information. Theoretical triangulation is used to check findings in the field against theories derived from books, journals, and expert opinions. Theoretical triangulation is used to prevent unnecessary data from being widely distributed. In addition to reducing data inconsistent with the research, theoretical triangulation is also used to build trust in a study by comparing field findings with pre-existing theories.

## **Data Analysis Techniques**

Data analysis techniques are the process of searching for and organizing collected data so that conclusions can be drawn and used as information that can be understood by both the researcher and others. In this study, the researcher used the data analysis model. The data

collection stages are as follows: This stage involves data collection through observation, interviews, and documentation. The researcher serves as the key instrument in data collection. The longer the researcher is in the field, the greater the amount of data obtained, and the more varied it becomes. There is observable data and data that cannot be observed, such as data about feelings and emotions. Selecting and focusing on the most important and summarizing the main data. Data reduction facilitates data collection. The most common method of presenting data in qualitative research is narrative text. To avoid overwhelming the data collection, the snowball sampling method was used to select informants in this study. The snowball sampling technique is a technique for collecting data from a small number of sources initially, which then increases. This is because the data sources are not satisfactory, so additional informants are sought to be used as data sources.

## RESULT AND DISCUSSION

Introduction of occupational safety and health management system (SMK3) in PT. The case study of PLAN (Persero) UP3 south Makassar shows that it complies with GB Reg No. 50 of 2012 and does not deviate in its practice compared with that in other PLN units. The establishment of policies, planning scheme, carrying out tactics, monitoring, and reappraisal schemes in its fulness establishes the impression of the full-fledged and functional OHS system. But upon deeper examination, one would state that these successes would have to be considered with a grain of salt with reference to the sustainability of these successes, cultural assimilation and the standards that reflect the global best practices.

The company has mechanisms in control and enhancements, such as quarterly trainings, inspection and working with the Department of Manpower however, the use of punitive elements including warnings and terminating contracts of employees is questionable. The common theme of OHS bodies is that compliance itself based on sanction usually helps gain short-term compliance, yet does not improve the ultimate guide to bringing about intrinsic safety awareness leaves that workers own their particular safety precautions. In that regard, the approach adopted by PLN threatens to create a perception of fear, instead of a sense of collective culpability. An effective sustainable safety culture involves a participatory culture where workers do not understand either OHS as an issue that they must fulfill but as a community value entrenched in daily routines.

The system of making unscheduled inspections seems to be functional and is not critically reviewed regarding the scope and effectiveness. Based on the evidence provided, inspections tend to look at such glaring issues as non-wearing of PPE even though the root causes may be a broken system (poor training, lack of adequate resources, or a weak system of reporting). International standards like ISO 45001 have focused on proactive risk management as well as constant improvement, which motivates the organizations to evade compliance checking and start systematic learning and innovation. In the absence of such rumination, PLN will continue to have an orientation of reactivity rather than prevention in its OHS system.

The other weakness is that the discussion fails to capture critical issues that have been recognized in the remaining parts of the study. Among the topics mentioned in the abstract the lack of OHS professionals and financial limitations are not significantly considered in the analysis. Such are critical resource gaps, which will directly compromise the effectiveness and sustainability of SMK3 implementation. To illustrate this, the limited supply of experts prevents the company to perform a comprehensive process of risk identification and analysis of risks, as well as investment in protective equipment, education and monitors. Any discussion that ignores these factors runs the risk of reporting and over-reporting the strength of the successes of the firm.

More crucial, no behavioral compliance problems pointed out in the introduction are concluded, e.g. selective wearing of PPE by workers only in situations of increased risks. This exclusion effects a gap between the official practices and experienced worker practices. The issue of disparities in OHS is analyzed repeatedly according to research, as it reveals that this category

of challenges is a typical feature and one of the hardest to consider. The failure to question such behavioral patterns leaves the discussion lacking a chance to venture into the aspect of how organizational culture, peer influence, and management communication contribute to compliance with the institution as opposed to the formal enforcement mechanisms.

Further, the study refers to the accident statistics such as cuts, falls and hearing loss caused by noise but fails to relate the same to the effectiveness of implementing SMK3. The lack of such connection makes the discussion simply descriptive and thus makes no critical analysis on whether the system is reaching the final objective of reducing workplace accidents and occupational diseases. Effective SMK3 systems have been proposed rather than simply associated with compliance with the procedure, but evident improvements in safety outcomes have also been proposed as well.

Literature integration is also scanty and mostly relies on other studies relating with common literature on PLN. Such a limited scope does not allow placing the findings within the general framework of OHS management in the Indonesian industries or the global discourses. Using broader academic viewpoints would ensure the work paper possesses an input towards the existing debate on the essence of the organizational culture, resource sufficiency and lifelong learning in forming resilient OHS systems. As an example, ISO 45001 promotes participatory provisions where workers actively participate in the OHS practices formation-dimension whereby PLN lacks a developed system at the time.

While PT. The compliance with the regulatory requirements is highly commendable by PLN (Persero) UP3 South Makassar has shown so far, therefore, the evidence points to the fact that the implementation of SMK3 is similarly to the compliance-driven activity. The lack of critical thinking related to the resource constraints, cultural forces, and the outcome measures corrupts the level of discussion. To reinforce this part, it is not only important to highlight the accomplishments of the company but also actually challenge the challenges that have plagued the company over time, pressurize contradictions between policy and practice and harmonize practices with international norms. Through this, the analysis would be more balanced and academically rigorous, showing both areas of positive achievement as well as areas that would need substantial improvement to have an effect of improving long-term safety.

### **Establishment of Occupational Safety and Health Policy**

To optimize the implementation of the Occupational Safety and Health Management System (SMK3) at PT. PLN (Persero) UP3 Makassar Selatan, an Occupational Safety and Health Supervisory Committee (P2K3) was established. P2K3 is an institution established by a decision of the Manager of PT. PLN (Persero) UP3 Makassar Selatan. Based on interviews with additional informants, the following responses were obtained:

*"Yes, there is a company commitment to its OHS policy. At PLN, we have a strong commitment to OHS. For example, all employees here receive emergency response training, and we often collaborate with the Department of Manpower regarding OHS training. For the OHS (P2K3) program, we also have a P2K3 secretary who is an expert, and we frequently conduct inspections and hold P2K3 meetings."*

Meanwhile, according to a supporting informant, the following results were obtained from interviews:

*"Yes, PLN has an OHS policy that has been implemented. That's one of the internal policies here. For example, the company provides PPE, an OHS coordinator, and OHS signs/signs. There's also a P2K3 here."*

Meanwhile, a regular informant also conveyed the same sentiment in the interviews:

*"Yes, there is an internal company commitment to OHS policies. Furthermore, I think PLN has a strong commitment to OHS. For example, all employees, especially those in the machinery and network departments, are required to wear PPE while working."*

*Furthermore, the company provides PPE, and we also have a commitment to occupational safety to achieve zero accidents."*

Meanwhile, a key informant from the interview stated the same thing:

*"We have an OHS policy here. The company frequently communicates OHS to all employees, in accordance with applicable laws. We even frequently conduct emergency response training. We have also established a P2K3 (Occupational Health and Safety Supervisory Agency) that manages all aspects of the OHS management system at PLN. All employees and field workers support this by implementing every program developed by P2K3 members."*

In accordance with the above answer, it is known that PT. PLN (Persero) UP3 Makassar Selatan has a serious commitment and policy to effectively implement SMK3. Furthermore, based on observations conducted by the researcher, the researcher found that PT PLN Persero UP3 Makassar Selatan has a written policy related to occupational health and safety programs. The following are the results of the researcher's observations.

### **Occupational Health and Safety Policy Planning**

The Occupational Health and Safety policy planning at PT. PLN (Persero) UP3 Makassar Selatan involves formulating occupational health and safety policies within the company, as well as planning the implementation of occupational health and safety policies, objectives, and targets. This is done to ensure compliance with the implementation of the Occupational Health and Safety Management System (OHSMS) policy established at PT. PLN (Persero) UP3 Makassar Selatan. Based on interviews conducted during the research related to the OHSMS at PT. PLN (Persero) UP3 Makassar Selatan and the OHS planning variables at PT. Researchers at PLN (Persero) UP3 South Makassar obtained the following answers:

*"There are procedures, and they certainly take into account potential hazards and other things. The risk assessment is also carried out by competent personnel. At PLN, the procedures and the completeness of PPE are now better, unlike before. Now everything is provided by the company."*

Meanwhile, according to a supporting informant, the following answer was obtained from the interview results:

*"Yes, PLN itself has such procedures in place, and everything is carried out systematically. The procedures certainly take into account potential hazards, risk assessments, and control measures."*

Meanwhile, according to a regular informant, the following answer was obtained from the interview results:

*"Yes, PLN itself has such procedures in place, and everything is carried out systematically. The procedures certainly take into account potential hazards, risk assessments, and control measures." and its control measures."*

Meanwhile, according to a key informant interviewed, the following answer was obtained:

*"Yes, there is. One way to improve the company's OHSMS policy planning is by developing procedures based on risk analysis. For example, there are JSA procedures and Hazard Identification, Risk Assessment, and Control procedures. All of these procedures have taken into consideration the potential hazards and risk control measures."*

The planning carried out at PT. PLN (Persero) UP3 South Makassar is as follows: Hazard Identification, Risk Assessment, and Control (IBPPR), Hazard identification, risk assessment, and control are carried out to determine the potential for workplace accidents in the PT. PLN (Persero) UP3 South Makassar work environment. The resulting data can be used as a reference for implementing corrective actions. The hazard identification, assessment, and risk control processes are carried out by the Risk Management Team, which consists of representatives from the P2K3 (Occupational Safety and Health) team from each assigned division. The results of this

risk assessment can then provide solutions or control measures for existing hazards to prevent harm to workers, production processes, and property at PT. PLN (Persero) UP3 Makassar Selatan.

### **Implementation of Occupational Safety and Health (OHS) Planning**

Effective implementation of occupational safety and health (OHS) planning by developing the necessary capabilities and supporting mechanisms to achieve occupational safety and health policies, objectives, and targets. PT. PLN (Persero) UP3 Makassar Selatan fully supports the effective and efficient implementation of the Occupational Safety and Health Management System (SMK3). In addition to financial support, PT. PLN (Persero) UP3 Makassar Selatan also strives to provide personnel with OHS qualifications. To optimize the implementation of the SMK3 within the company, PT. PLN (Persero) UP3 Makassar Selatan has established the P2K3 (Occupational Safety and Health Advisory Committee). Based on interviews conducted during research regarding the Occupational Safety and Health Management System at PT. When asked about the implementation of Occupational Safety and Health Planning at PT PLN (Persero) UP3 South Makassar, researchers received the following response from an additional informant:

*"Yes, there is already OSH implementation here. It's good, especially since we have an OSH supervisor who directly coordinates OSH issues. We have also tried to implement it well, for example, by conducting several OSH support activities, such as frequent fire simulations, emergency response, and so on." (February 23, 2024, EL 39).*

Meanwhile, according to a supporting informant, the following response was obtained from the interview results:

*"We are obliged to pay attention to OSH here. Field workers are required to use PPE and have a permit if they work at heights. The point is that we work here according to the SOP. So, the implementation is clear, as is the case with PPE. PLN prepares PPE, so it's mandatory. We also frequently use it for emergency response."*

Meanwhile, according to a regular informant, the following response was obtained from the interview:

*"Look, we who work at PLN all have to follow the company's SOPs, especially those of us who work in high-risk fields. Therefore, we must adhere to the SOPs. Especially for PPE, which the company has prepared, which is important and must be used. Regarding K3 (Occupational Health and Safety), we definitely adhere to it because it concerns our safety while working."*

Meanwhile, according to a key informant, the following response was obtained from the interview:

*"Yes, we have it. It's complete here and complies with laws and regulations. Our staff here are definitely competent. They certainly have work permits for heights. We also have SOPs here, so all employees must follow them. Yes, regarding permit limits, we have some places with entry restrictions. K3 signs are in place, and equipment maintenance is often carried out here, because again, we have to..." In accordance with the SOP for emergency use, we usually collaborate with several stakeholders to conduct special training."*

From the results of interviews conducted by researchers with regular informants, supporters, key informants, and additional informants, it can be concluded that the implementation of the OHS plan at PT. PLN (Persero) UP3 South Makassar has been carried out effectively.

### **Monitoring and Evaluation of OHS Performance**

Monitoring and evaluation of OHS performance are carried out at the company. Based on interviews conducted during the research regarding the monitoring and evaluation of OHS performance at PT. At PLN (Persero) UP3 South Makassar, researchers obtained the following response from an additional informant:

*"Yes, there is always monitoring and evaluation conducted by the OHS supervisor of field activities. We also always report work through documentation, and the supervisor also regularly goes directly into the field to supervise and monitor."*

Meanwhile, according to a supporting informant, the following response was obtained from the interview results:

*"There are inspections conducted by UP3 of the performance of the rayon management. In addition, there are also internal OHS audits conducted jointly by UP3 and the OHS supervisor."*

Meanwhile, according to a regular informant, the following response was obtained from the interview results:

*"When we are in the field, the OHS supervisor usually goes directly to supervise. So, we are under control and comply with SOPs." (February 23, 2024, MR 38th).*

Meanwhile, according to a key informant, the following response was obtained from the interview results: The following responses were obtained during the interviews:

*"We conduct inspections quite frequently, even down to the sub-districts under the auspices of the South Makassar UP3. We also frequently conduct monitoring. Regarding health checks, we collaborate with PT. Telkomedika. Signs are already installed and are in accordance."*

From the results of interviews conducted by the researcher with regular informants, supporting informants, key informants, and additional informants, it can be concluded that monitoring and evaluation at PT. PLN (Persero) South Makassar UP3 is very good, with both employees and officers understanding the importance of OHS.

### **OHS Review and Improvement**

To ensure continued suitability and effectiveness for achieving OHSMS objectives, employers and or workplaces must periodically review the implementation of the OHSMS. These OHSMS reviews must address OHS across all activities, products, and services, including their impact on company performance. Based on interviews conducted during the research related to OHS Review and Improvement at PT PLN (Persero) UP3 Makassar, we received the following response from an additional informant:

*"We frequently conduct training, and OHS enforcement here is quite strict. We also frequently conduct inspections, and we typically issue first and second warnings, even contract termination, for more than two warnings for workers who fail to wear PPE. We also conduct routine quarterly outreach for employees, technical staff, and others."*

Meanwhile, according to a supporting informant, the following response was obtained from the interview results:

*"There is training on OHS. We usually collaborate with the Manpower Office. We are a state-owned enterprise, so we must also follow the central government's directives, and the central government's guidance regarding OHS is quite concerned."*

Meanwhile, according to a regular informant, the following response was obtained from the interview results:

*"There is always training on OHS, and it is usually disseminated to us as employees. The OHS supervisor usually conducts it."*

Meanwhile, according to a key informant, the following response was obtained from the interview results:

*"Yes, there is. We always conduct training and also frequently disseminate information on the importance of OHS, both to employees and to business partners. In addition, I frequently evaluate employees regarding compliance with PPE use and adherence to OHS principles."*

From the results of interviews obtained by researchers with regular informants, supporters, key informants, and additional informants, it can be concluded that the role of the OHS team at PT PLN (Persero) UP3 South Makassar is crucial in helping implement the occupational safety and health management system.

### **Establishment of OHS Policy at PT PLN (Persero) UP3 Makassar Selatan**

The OHS Policy is a company statement that must disseminate the established OHS policy to all workers, non-workers within the company, and other relevant parties. In establishing an OHS policy, the company must do several things: conduct an initial review of OHS conditions, continuously monitor OHS management performance improvements, and consider input from workers and/or labor unions. The policy implementation at PT PLN (Persero) UP3 Makassar Selatan is very good based on field findings. Furthermore, interviews with several informants indicated that the situation was "good" because they still clearly understood the OHS policy and the information provided throughout the company. Establishing an occupational safety and health policy demonstrates the company's commitment to complying with applicable laws and regulations. Based on field observations, PT. PLN (Persero) UP3 South Makassar has implemented the OHS policy regulations based on Government Regulation 50 of 2012, as demonstrated directly in the field by indicators for establishing an OHS policy, such as a written OHS policy, the existence of a P2K3 (Occupational Safety and Health Management System), and other information that includes the company's vision, objectives, commitment and determination to implement the OHS policy and its commitment to OHS improvement, as well as a work framework and program.

Based on Government Regulation Number 50 of 2012 concerning the Occupational Safety and Health Management System (SMK3) and various other regulations, every company is required to implement an OHS SMK3 within its premises. The State Electricity Company (PLN), as a state-owned enterprise providing electricity services, is also required to implement an Occupational Health and Safety Management System (SMK3) in various projects. Research conducted at PT. PLN (Persero) UP3, specifically in South Makassar, on the variable of Occupational Health and Safety Policy Determination, revealed that PT. PLN (Persero) UP3 South Makassar has a strong commitment to implementing an SMK3. This is evident in the company's management's commitment to achieving zero accidents through seven Occupational Safety Commitments: Competent Human Resources (HR), Standard Operating Procedures (SOPs), Personal Protective Equipment (PPE), Tools, Job Safety Analysis (JSA), Signs, and Safe Machinery/Installations. These results align with Salafudin M in previous research at PT. PLN (Persero)'s Central Java and Yogyakarta Distribution Regulatory Area stated that "There are other policies that are also a commitment of PT PLN (Persero)'s Central Java and Yogyakarta Distribution Regulatory Area in optimizing the implementation of SMK3, such as achieving Zero Accidents in all work, both in the field and within the PT PLN (Persero) Central Java and Yogyakarta Distribution Regulatory Area offices. Furthermore, there are also routine improvements to Standard Operating Procedures (SOPs) to achieve Zero Accidents".

### **OHS Policy Planning at PT PLN (Persero) UP3 South Makassar**

The planning system is designed to produce an OHS plan, which is prepared and implemented by the company, referring to established OHS policies. Furthermore, company activities/programs must be integrated with company management, which must also involve OHS experts, the OHS Advisory Committee, employee representatives, and other relevant parties within the company. Planning is an important element of management. Therefore, within the OHS Management System (SMK3), planning is one of the elements that must be implemented by the company. Overall, PT. PLN (Persero) UP3 South Makassar has implemented an OHS plan in accordance with Government Regulation of the Republic of Indonesia Number 50 of 2012, based

on direct interviews conducted by the researcher. The company's OHS plan has been aligned with the company's management system plan. The company's OHS work program is based on hazard identification, risk assessment, site inspection, and prioritizing control measures.

The OHS program is then developed based on the initial assessment and relevant laws and regulations and OHS requirements. Based on the research results, specifically on the research variables, it is known that PT. PLN (Persero) UP3 South Makassar has prepared an OHS plan adequately. Observations and research conducted by the researcher indicate that the company, in fulfilling the OHS plan requirements, includes clear objectives and targets, hazard control measures, priorities and implementation timelines, an accountability system, resource allocation, and achievement indicators. These findings align with research conducted by Salafudin, who stated that planning, in this case, also includes planning related to hazard identification, risk assessment, and risk control. PT PLN (Persero) Distribution Management Area for Central Java & Yogyakarta Special Region formed a hazard identification, risk assessment, and control team by appointing one employee for each division. The team's duties include identifying hazards and potential occupational accident risks in each division. This team is also tasked with periodically checking and revising Standard Operating Procedures (SOPs) to ensure that all work is carried out safely and maintains standards.

### **Implementation of OHS Planning at PT PLN (Persero) UP3 South Makassar**

The OHS plan is implemented by the company, supported by human resources in the OHS, infrastructure, and facilities sectors. These human resources must possess work competency, as evidenced by a certificate, and authority in the OHS field, as evidenced by a work/operation permit and/or a letter of appointment from the authorized agency. In implementing the OHS plan, the company must conduct activities to meet OHS requirements and be implemented based on hazard identification, risk assessment and control, accident investigation, and analysis, which consist of: Control measures; Design and engineering; Work procedures and instructions; Partial handover of work; Purchase procurement of goods and services; Final product; Efforts to respond to industrial accidents and disasters; and Emergency planning and recovery. The main element of the OHSMS is the planning implementation element. Without consistent and continuous implementation in accordance with applicable regulations, the Occupational Health and Safety Management System (SMK3) cannot be effectively implemented.

Therefore, every company is required to implement the SMK3 properly in accordance with the regulations required for each company. Based on research results, specifically on the implementation variable, it is known that the management of PT. PLN (Persero) UP3 Makassar Selatan has made optimal efforts to implement the SMK3. This is evident through various efforts and activities undertaken by the company, such as: the obligation for all employees to work in accordance with Standard Operating Procedures (SOPs), the obligation for employees to always observe and implement OHS principles at work, for example, the mandatory use of PPE for field/network workers when carrying out work in the field, and the implementation of supporting activities for OHS implementation, such as firefighting simulations and troop deployments for various important events/activities. This research is in line with the research conducted by (Suyitno, et.al, 2025) that the implementation of the K3 plan in the Pakuwon Super Mall and Telkom Group Surabaya Building construction projects was generally good, but there were obstacles in its implementation, such as workers who were sometimes less aware and underestimated the implementation of K3.

### **Monitoring and Evaluation of OHS Performance at PT PLN (Persero) UP3 South Makassar**

The company's OHS performance monitoring and evaluation must be conducted through inspections, testing, measurements, and internal audits of its OHS Management System (SMK3) conducted by competent human resources. If the company does not have the resources to conduct OHS performance monitoring and evaluation, it may employ the services of an external party. The results of the OHS performance monitoring and evaluation are then reported to the company for corrective action. Every company, including PT PLN (Persero) UP3 South Makassar, must

implement OHS Management System (SMK3) by considering measurement and evaluation elements. This is crucial to ensure that OHS Management System (SMK3) implementation can be systematically measured. This ensures that every planned program, main activity, and supporting OHS activities can have a significant impact on creating a healthy work environment and work behavior, and can support employee performance and productivity, which can positively enhance the company's image.

Regarding the inspections and tests conducted through OHS Management System (SMK3) internal audits and external audits, internal audits are conducted by a competent team, while external audits are conducted by an independent institution, namely PT. Surveyor Indonesia. The results of the audit will be used as a basis for improvement. Tudermi's research, specifically on the Measurement and Evaluation variables, revealed that PT PLN (Persero) UP3 Makassar Selatan has also implemented measurement and evaluation effectively. This is evident from inspections conducted by the Customer Service Implementation Unit (UP3) on the performance of Rote Ndao Rayon management. In addition, internal OHS audits are conducted by the UP3 and the OHS Supervisor, including OHS audits of work partners, including: Work Plans and Requirements (RKS) and Work Orders (SPK), competency certificates, Standard Operating Procedures (SOPs), work equipment, Personal Protective Equipment (PPE), and the implementation of an OHS management system. The targets are: Village Electricity Work Partners, MCB-On (CV) Work Partners, Network Expansion Work Partners, ROW (Right of Way) or Overpass Teams, Substation/Measuring Substation Maintenance, Meter Maintenance, Network Maintenance, and Equipment Commissioning/Trialing, as stated in the 2019 RKAP (Work Plan and Budget).

### **OHS Review and Improvement at PT PLN (Persero) UP3 South Makassar**

A review is mandatory for a company to ensure the suitability and effectiveness of the OHSMS implementation. This review encompasses policies, planning, implementation, monitoring, and evaluation. The results of this review are then used to improve and enhance international performance (PP 50, 2012). The final, equally important element of the OHSMS is the need to review each OHSMS implementation process carried out by the company. Based on the research results, it was discovered that PT. PLN (Persero) UP3 Makassar Selatan has conducted a review of its OHSMS implementation within the company through ongoing outreach on the importance of OHS, both to employees and security personnel, and education for technical service partners such as vendors or partner companies. It also involves cross-sector OHS outreach and reporting of unsafe acts and unsafe conditions in high- and medium-risk jobs such as power grid expansion, transformer installation, and clearing or clearing of electrical cables.

This ongoing outreach is conducted quarterly and coordinated by the OHS Supervisor. The OHS Supervisor also consistently evaluates employee compliance with PPE use and OHS principles. One way to evaluate employee compliance with PPE use is through the obligation to document and report all work performed by employees to company management, specifically the OHS Supervisor. Based on the work documentation reports submitted by network workers to PLN management, the OHS Supervisor evaluates compliance with PPE use. As a follow-up, if any employee is found not to be using PPE while working, they will be issued a first and second warning letter. If, after two warnings, violations still occur, the employee's contract can be terminated.

### **CONCLUSION**

The Occupational Safety and Health Management System Policy at PT. PLN (Persero) UP3 Makassar has been implemented effectively due to the company's existing policy. The Occupational Safety and Health Management System Planning at PT. PLN (Persero) UP3 Makassar has been implemented effectively due to the planning of the procurement and construction of OHS facilities. The implementation of the Occupational Safety and Health Management System at PT. PLN (Persero) UP3 Makassar has been implemented effectively because work always adheres to the company's SOPs. The Measurement and Evaluation of the Occupational Safety and Health Management System at PT. PLN (Persero) UP3 Makassar has been implemented effectively due

to the ongoing monitoring and internal audits by the OHS supervisor. The Review and Improvement of the Occupational Safety and Health Management System at PT. PLN (Persero) UP3 Makassar has been implemented effectively due to the ongoing unannounced inspections conducted by the OHS supervisor to ensure consistent OHS implementation. Any violations of procedures will be subject to sanctions in accordance with the company's internal regulations.

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