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Research Paper

# Study of Implementation of Duties and Authorities of Users and Construction Service Providers in Construction Safety Management Systems in Government Construction Works in South Borneo

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## **ABSTRACT**

Banjarmasin, South Borneo Indonesia managed to get the Safety Management Systems award for four consecutive times. However, a study conducted by Syahrolly (2017) said that there were still cases of work accidents during construction work where these cases occurred during construction projects. On the basis of this difference, it is necessary to study the implementation of Safety Management Systems . The study was conducted to determine the level of implementation of Safety Management Systems organizers on the duties and authorities of Safety Management Systems implementers and to develop strategies for implementing Safety Management Systems problems in South Kalimantan. This study uses a Likert scale as a measuring tool and performs quantitative descriptive analysis techniques. The result data were carried out by implementation categorization, namely low, medium, and high. Low categorization results are considered a problem, and a study is carried out to obtain strategies to overcome problems. From this study, it was concluded that the level of implementation of Safety Management Systems implementers in accordance with their duties and authorities was included in the medium category. Almost all Safety Management Systems implementers have implemented Safety Management Systems very well. By identifying the low category of Safety Management Systems implementation scores, it is known that the problem is the lack of new knowledge about policies and the disposition of Safety Management Systems experts. The strategy is to routinely socialize with certain conditions. Conduct a review of policy changes again by including Safety Management Systems as the realization of physical work.

**KEYWORDS:** Construction Safety Management Systems; Problems of Safety Management Systems; South Borneo; Indonesia

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## I. INTRODUCTION

South Borneo based on an online media article managed to get an award for Safety Management Systems from 2017 to 2020. The Safety Management Systems award is an annual agenda of the Ministry of Manpower to improve the implementation of Safety Management Systems for companies, local governments, trade unions and workers in implementing OSH. According to Huda (2020) obtaining this award is the result of the hard work of all relevant stakeholders, both the government, companies and their workers. This award can also be a motivation to continue to develop and improve the workforce management system properly. The success of South Borneo in getting the award four times in a row gives an illustration that the implementation of Safety Management Systems is very high. However, in fact a study conducted by Syahrolly (2017) says that there are still cases of work accidents during construction work where these cases occur when construction projects are carried out. Cases that occurred as many as 35 cases of work accidents. This case occurred because the provision of personal protective equipment was not fully fulfilled by the contractor in the construction project of the Sugara Island steel truss bridge, Barito Kuala Marabahan Regency. So these two different sides make the question of whether the level of Safety Management Systems implementation in South Borneo is already high.

In its development, Erwaniansyah (2019) conducted a study with the title Application of Safety Management Systems in the implementation of Construction Project Work. Where Erwaniansyah concluded that in the implementation of Safety Management Systems for field observations the Safety Management Systems Program in the work environment was good but not yet fully implemented. Meanwhile, his strategy is the implementation of Safety Management Systems by establishing a solid safety committee and disciplined safety committee in implementing Safety Management Systems rules routinely conducting guidance in the form of safety talk every morning, inspection of equipment and workers' equipment, as well as giving light and heavy sanctions for workers who have violated the rules, has been established.

With the aim of knowing the extent to which the application of Safety Management Systems in the planning of construction projects to the implementation of Safety Management Systems by the implementer and strict supervision by the agency that owns the work and looking for a strategy for implementing the Safety Management Systems that is appropriate and can be implemented by all parties, a study on the implementation of the Safety Management Systems was made This application is related to Safety Management Systems implementers to carry out the duties and authorities of the Safety Management Systems. This research can provide benefits in the future. The benefits of this research are expected to be a reference in making decisions in implementing Safety Management Systems for various parties and helping in reducing the risk of work accidents, especially construction projects in South Kalimantan.

From the background described above, the problems raised in this study are how the level of implementation of the duties, responsibilities, and authorities of users and service providers in the implementation of Safety Management Systems so far and how to overcome problems from the implementation of the duties, responsibilities, and authorities of users and service providers. service providers who are lacking in the implementation of Safety Management Systems in accordance with the ministerial regulations regarding the OHS Guidelines that apply to construction projects in South Kalimantan. The research objectives based on the formulation of the problem are to determine the level of implementation of the implementation of Safety Management Systems on the duties, responsibilities, and authorities of the implementing Safety Management Systems so far and develop strategies from the problems of implementing Safety Management Systems on the duties, responsibilities and authorities of users and service providers who are lacking in regulations published in planning construction project in South Kalimantan.

## II. RESEARCH METHODS

#### 2.1 Implementation Calculation Procedure

The steps for the procedure for determining the level of implementation are as follows:

- 1. Take the questionnaire according to the minimum number of samples.
- 2. The variables of the questionnaire were validated and tested for reliability.
- 3. Calculate the implementation level score from the Likert scale with calculated limits.
- 4. Draw the results of the implementation level analysis according to the Safety Management Systems implementing parties, namely contractors, consultants, Employers' Agencies , or the PROCUREMENT SERVICE UNIT Team.
- 5. Analyze the implementation level of the OSH implementing parties then compare them with each and draw conclusions.

# 2.2 Strategy Development

Steps for strategy development include the following:

- 1. Literature study to obtain variables variables in this case the workers in the Safety Management Systems procedure.
- 2. Variables from the literature study were validated on respondents with field conditions regarding their duties and authorities.
- 3. Identifying implementation problems from the results of respondents from the OSH implementing parties, namely whether contractors, consultants, Employers' Agencies, or the PROCUREMENT SERVICE UNIT Team.
- 4. The data required are:
- a. The results of the questionnaire that has been carried out for this research.
- b. Results of interviews with related respondents.
- 5. Based on the results of the questionnaire, steps were taken to improve implementation with suggestions and input from interviews with respondents who were experts in Safety Management Systems. Then an implementation strategy is determined for the duties and authorities of each Safety Management Systems implementer.

## 2.3 Population dan Sample

By using the Slovin formula based on the existing population, a minimum sample is taken. Due to limited research time and pandemic conditions. The error value of the data taken in this study is 15%, according to the indicator 2% - 15%. The minimum number of samples can be seen in Table 1.

**Tabel 1**. Determination of the minimum number of samples

Construction Safety Officer	Population	Sample	Minimum Sample
Consultant Service Provider	650	41.6	42
Contractor Service Provider	650	41.6	42
Procurement Service Unit	150	34.3	35
Construction Service User (Regional Service)	225	37.1	38

#### 2.4 Data Test

Validity test is carried out to determine the extent to which the validity, accuracy and accuracy of a measuring instrument in carrying out its function is then carried out a validity test.

Tabel 2 Testing the Validity of Implementing Safety management System for officer

		r calculation		
Question Items	the Procurement Service Unit officer	Contractor Service Provider	Service User	Consultant Service Provider
1	0.475	0.723	0.328	0.875
2	0.516	0.658	0.351	0.834
3	0.688	0.66	0.359	0.882
4	0.561	0.746	0.8	0.72
5	0.55	0.79	0.913	0.845
6	0.502	0.639	0.517	0.884
7	0.33	0.656	0.906	
8	0.384	0.75	0.929	
9	0.337	0.756	0.86	
10	0.68	0.827	0.92	
11		0.803	0.735	
12		0.844	0.893	
13		0.701	0.812	
rtable	0.304	0.304	0.325	0.294
Information	Valid	Valid	Valid	Valid

Based on the table of validation results, it can be seen that all questions for variables have valid status, because the value of r count ( Corrected Item-Total Correlation) > r table so that the data can be used in research. Reliability tests were carried out on question items that were declared valid. A variable is said to be reliable or reliable if the answers to the questions are always consistent.

Tabel 3 Reliabilitas Test for Construction Safety Management Systems Officer

Safety Management Systems Officer	Questions Items	Cronbach's Alpha	Reliabilitas
Consultant Service Provider	6	0.94	Very High
Contractor Service Provider	13	0.924	Very High

Government Service User	13	0.922	Very High
Procurement Service Unit	10	0.658	High

So as the basis for decision making in reliability testing, it can be concluded that all items in the questionnaire are reliable or consistent

#### III. RESULT

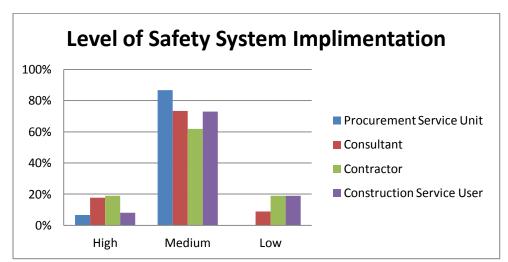
# 3.1 Level of Safety Management Systems Implimentation

From the results of data analysis and calculations, for implementing Safety Management Systems, namely Service Users, Service Providers, and Procurement Service Unit, an implementation category is made. The result is Highest implementation rate for Procurement Service Unit. Then from the results of this categorization an average is made to draw conclusions in Table 4.

**Tabel 4** Categories of Respondents' Average Answers for Implementing

Safety Management Systems Officer	Average value of respondents	Category
Construction Service User	3.678	Medium
Contractor	3.745	Medium
Consultant	3.811	Medium
Procurement Service Unit	4.029	Medium

Overall the highest level of value is the Procurement Service Unit response with a value of 4.029 . Procurement Service Unit is defined as having the level of implementation of its duties and authorities in general in accordance with existing regulations or current regulations. Followed by the Consultant who has the results of respondents below the Procurement Service Unit with the level of implementation of the duties and responsibilities of understanding all in outline according to the provisions that apply to the Safety Management Systems Law. The lowest value is Construction Service User where it is worth 3.678 which this value means that the level of implementation of tasks and authority is only in the medium category. With these results, it can be said that the level of knowledge of Service Users and contractors is still in the moderate category that requires further improvement.



**Figure 2** Level of Safety Management Systems Implimentation towards duties and responsibilities in the construction procurement process

Based on the results of the respondents the lowest level of implementation is in the Service User . With the level implimentasi this low then the need for a specific method for me n ingkatkan implimentasi about Safety Management Systems. Meanwhile, Procurement Service Unit has good grades, followed by consultants. The values of this Safety Management Systems should be improved again.

So it can be concluded that the implementation above 50% is good and always in accordance with the procedures that have been applied, especially Procurement Service Unit and Consultants . In contrast to contractors and consultant service users, the level of implementation of their duties and responsibilities is less, so adjustments and strategies are needed to be able to improve implementation according to procedures.

## 2.5 Identifikasi Masalah Implimentasi

The results of the identification from the questionnaire and from the interview are then combined with the problems in Table 5.

Tabel 5 Results of Identification of Implementation Safety Management System Problems

Procurement Service Unit	Consultant	Contractor	Service User	Supervising consultants
Lack of knowledge of respondents about Safety Management System rules	lack of knowledge of respondents about Safety Management System rules	lack of knowledge of respondents about Safety Management System rules	lack of knowledge of respondents about Safety Management System rules	lack of knowledge of respondents about Safety Management System rules
lack of socialization of explanations regarding the potential hazards of Safety Management System to bidders	Problems with competent people which sometimes planning consultants rarely involve Safety Management System experts or planners do not know about Safety Management System so that contractors need to readjust the Safety Management System	Implimentasi to contractors are still not fully implemented at the time of work in progress.		
		Disposition problems are experts who work inappropriately, some even have names but in fact they are never present at work, to carry out their duties as Safety Management System experts or officers.		

By looking at the results of interviews and the results of the research instrument, it is necessary to review the Safety Management Systems regulations. Legislation as a product of public policy is a political commodity that concerns the public interest. However, the various dynamics that occur can have the consequence that public policies can also be improved.

Tabel 9 Strategy Implementation of Duties and Responsibilities of Safety Management Systems Officer

Safety Management Systems	Problem		Strategy
Consultant	Communication (Lack Knowledge in Regulation) and disp o side	of the	Conducting socialization in various forms regarding the latest Safety Management Systems regulations, maximizing and further socializing about Safety Management Systems regulations, Safety Management Systems equipment, signing together the Safety Management Systems commitments, the disposition of appropriate experts and strict sanctions if they do not meet the requirements.
Kontraktor	Komunikasi dan Disposisi		Conducting socialization in various forms regarding the latest Safety Management Systems regulations, signing together the Safety Management Systems commitments, the disposition of the need for appropriate experts and strict sanctions if they do not meet the requirements.
Procurement Service Unit	Komunikasi		Conduct routine socialization in various forms regarding Safety Management Systems regulations, and explain OHS risks during the auction process.
Instansi Pemilik Pekerjaan	Komunikasi		Conduct routine socialization in various forms, regarding Safety Management Systems regulations, create and include Safety Management Systems as the realization of physical work, create strict sanctions if Safety Management Systems experts are not in accordance with their work.

Policy socialization activities require prerequisites in order to be carried out properly, considering that these activities can be used as an illustration and basis for the implementation of policy implementation as set out in the objectives .

# IV. CLOSING

# 4.1 Conclusion

From the research that has been done, the following conclusions can be drawn:

The level of implementation of Safety Management Systems implementers in accordance with the duties and authorities according to the regulations in South Kalimantan is in the medium category. It can be interpreted that almost all Safety Management Systems implementers have implemented safety management

systems well. the order of implementing safety management systems with the category from the highest implementation value to the lowest is procurement service unit, then service providers and lastly service users.

by identifying problems in menginplimentasikan safety management systems, then in implimentasi safety management systems strategies that can be applied on each - each pe like safety management systems. the main problems of implementing safety management systems policies are the lack of new knowledge about policies and the inappropriate disposition of safety management systems experts, the first strategy is to routinely socialize with certain conditions if it is not carried out then make policy changes by including safety management systems costs as the realization of physical work for service users and contractor service providers so that with the progress of work all parties will actually implement the safety management systems.

# Suggestions

The Recommendation That Should Be Done Is That It Would Be Better To Do Further Research On The Implementation Of The safety management systems policy whether it is in accordance with the safety management systems implementer, as well as research on the relationship between the knowledge level of the safety management systems implementer with the implementation of the safety management systems policy and other similar research models, then include research again on the latest safety management systems Regulations PERMEN PUPR 2021 No. 10.

#### DAFTAR RUJUKAN

- Anonim<sup>1</sup>. 2020. Hal Tugas Pokok dan Fungsi inas PUPR. http://pupr.pringsewukab.go.id/hal-tugas-pokok-dan-fungsi-dinas-pupr.html (Diakses tanggal 26 Mei 2021)
- [2]. Anonim<sup>2</sup>. 2020. https://ulp.lkpp.go.id/index.php?halaman=struktur (Diakses tanggal 26 Mei 2021)
- [3]. Anonim<sup>3</sup>. 2018. Pengertian Pelaksanaan Tugas Pelaksanaan Tugas. https://text-id.123dok.com/document/7qvvlj80q-pengertian-pelaksanaan-tugas-pelaksanaan-tugas.html (Diakses 15 Oktober 2020)
- [4]. Arikunto, Suharsimi. 2013. Prosedur Penelitian: Suatu Pendekatan Praktik. Jakarta: Rineka Cipta
- [5]. Azwar, S. 2009. Sikap Manusia: Teori dan Pengukurannya (edisi 2). Penerbit Pustaka Pelajar Yogyakarta
- [6]. Daniel A Mazmanian, dan Paul A.Sabatier. 1983. Implementation and Public Policy. United States: University Press of America
- [7]. Edward III, George C. 1980. Implementing Public Policy. Washington DC: Congressional Quarterly Press.
- [8]. Erwaniansyah. 2019. Kajian Penerapan Keselamatan Dan Kesehatan Kerja Dalam Pelaksanaan Pekerjaan Proyek Konstruksi. Skripsi thesis, Universitas Lambung Mangkurat
- [9]. Ghozali, Imam. 2005. Aplikasi Analisis Multivariate dengan SPSS. Semarang: Badan Penerbit UNDIP
- [10]. Huda, Norhalis. 2020. Gubernur Kalsel raih Penghargaan K3 keempat kalinya bukti keseriusan perusahaan di Kalsel. https://banjarmasin.tribunnews.com/2020/10/08/gubernur-kalsel-raih-penghagaan-k3-keempat-kalinya-bukti-keseriusan-perusahaan-di-kalsel (Diakses tanggal 26 Mei 2021)
- [11]. Hupe, Peter L., dan Michael Hill. 2002. Implementing Public Policy. Singapore: SAGE Publications Asia-Pacific Pte Ltd
- [12]. Kasmad, Rulinawaty. 2013. Studi Implementasi Kebijakan Publik. Makassar: Kedai Aksara
- [13]. Kelly, M., dan Tincani, M. 2013. Collaborative Training and Practice among Applied Behavior Analysts who Support Individuals with Autism Spectrum Disorder. Education and Training in Autism and Developmental Disabilities, 2013, 48(1), 120–131.
- [14]. Kementerian Tenaga Kerja. 1980. Peraturan Menteri Tenaga Kerja No. 1 tahun 1980, tentang Keselamatan dan Kesehatan Kerja pada Konstruksi Bangunan. Jakarta
- [15]. Kementerian Tenaga Kerja. 1996. Peraturan Menteri Tenaga Kerja No. 5 tahun 1996, tentang Sistem Manajemen Keselamatan dan Kesehatan Keria. Jakarta
- [16]. Kementerian PUPR. 2008. Peraturan Menteri Pekerjaan Umum No. 9 tahun 2008, Pedoman Sistem Manajemen Keselamatan dan Kesehatan Kerja (K3) Konstruksi Bidang Pekerjaan Umum. Jakarta
- [17]. Kementerian PUPR. 2014. Peraturan Menteri PU Nomor 05/PRT/M/2014 tentang Pedoman Sistem Manajemen Keselamatan dan Kesehatan Kerja (SMKK) Konstruksi Bidang Pekerjaan Umum. Jakarta
- [18]. Kementerian PUPR. 2011. Peraturan Menteri Pekerjaan Umum Nomor 07/PRT/M/2011 Tentang Standar Dan Pedoman Pengadaan Pekerjaan Konstruksi Dan Jasa Konsultansi sebagaimana telah diubah terakhir kali dengan Permen PUPRNo.31/PRT/M/2015. Jakarta
- [19]. Kementerian PUPR. 2011. Permen PUPR No. 02/2018 tentang Perubahan atas Peraturan Menteri PU Nomor 05/PRT/M/2014 tentang Pedoman Sistem Manajemen Keselamatan dan Kesehatan Kerja (SMK3) Konstruksi Bidang Pekerjaan Umum. Jakarta
- [20]. Kementerian PUPR. 2019. Peraturan Menteri PUPR No.21/PRT/M/2019 tentang Pedoman Sistem Manajemen Keselamatan dan Kesehatan Kerja (SMK3). Jakarta
- [21]. Kementerian PUPR. 2015. Surat Edaran Menteri PUPRNo.66/SE/M/2015 tentang Biaya Penyelenggaraan SMKK Konstruksi Bidang Pekerjaan Umum. Jakarta
- [22]. Lembaga Kebijakan Pengadaan Barang/Jasa Pemerintah. 2019. Peraturan LKPP No.11 Tahun 2019. Jakarta
- [23]. Likert, R. 1932. A technique for the measurement of attitudes. Archives of Psychology, 22 140, 55.
- [24]. Moekijat. 1998. Analisis Jabatan. Bandung : Penerbit Mandar Maju
- [25]. Mthethwa, R.M. 2012. Critical Dimensions for Policy Implimentation. African Journal of Public Affairs, 5(2), 36-42
- [26]. Pemerintah Republik Indonesia. 2000. Peraturan Pemerintah Nomor 29 Tahun 2000 tentang Penyelenggaraan Jasa Konstruksi dan perubahannya. Jakarta
- [27]. Pemerintah Republik Indonesia. 2012. PP No.50 Tahun 2012 tentang Penerapan SMKK. Jakarta
- [28]. Pemerintah Republik Indonesia. 1986. Surat Keputusan Bersama Menteri Tenaga Kerja dan Menteri Pekerjaan Umum Nomor: 174/MEN/1986 & 104/KPTS/1986, tentang Keselamatan dan Kesehatan Kerja pada Tempat Kegiatan Konstruksi;
- [29]. Pemerintah Republik Indonesia. 1970. Undang-undang No. 1 tahun 1970, tentang Keselamatan Kerja. Jakarta
- [30]. Pemerintah Republik Indonesia. 1999. Undang nndang Nomor 18 Tahun 1999 tentang Jasa Konstruksi. Jakarta
- [31]. Pemerintah Republik Indonesia. 2017. Undang undang No. 02 Tahun 2017 tentang Jasa Konstruksi. Jakarta
- [32]. Purwanto, Erwan Agus. 2015. Implementasi Kebijakan Publik. Yogyakarta: Penerbit GAVA MEDIA
- [33]. Rahmah N. 2019. Tugas Konsultan Perencana, Konsultan Pengawas, dan Kontraktor.

- https://www.pengadaanbarang.co.id/2019/07/tugas-konsultan-perencana-konsultan-pengawas-dan-kontraktor.html
- [34]. Ramdhani, Abdullah. 2017. Konsep Umum Pelaksanaan Kebijakan Publik. Jurnal, Universitas Garut Silalahi. 1995. Manajemen Keselamatan Dan Kesehatan Kerja. Jakarta: PT Pustaka Binaman Pressindo
- [35]. Sugiyono. 2008. Metode Penelitian Kuantitatif Kualitatif dan R&D. Bandung : ALFABETA
- [36]. Sugiyono. 2013. Metodelogi Penelitian Kuantitatif, Kualitatif dan R&D. Bandung: ALFABETA
- [37]. Sugiyono. 2015. Metode Penelitian Kombinasi (Mix Methods). Bandung: ALFABETA
- [38]. Suryamadi, Nyoman.I.(2005). Efektifitas Implementasi Kebijakan Otonomi Daerah. Jakarta: Citra Utama
- [39]. Stout, H.D. 1994. De Betekenissen van de Wet. W.E.J Tjeenk Willink, Zwolle
- [40]. Syahrolly, M. Yanuar. 2017. Studi Kualitas Penerapan Keselamatan Dan Kesehatan Kerja (K3) Dan Kepuasan Pekerja Pada Proyek Pembangunan Jembatan Rangka Baja Pulau Sugara Kabupaten Barito Kuala-Marabahan, Provinsi Kalimantan Selatan. Skripsi thesis, ITN Malang.
- [41]. Uhlaner, Lorraine M. 2002. The Use Of The Guttman Scale In Development Of A Family Business Index. https://www.researchgate.net/publication/5012557 (diakses tanggal 15 Oktober 2020)

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