

Normative Regulation of Heavy Machinery and Civil Liability in Cases of Traffic Accidents, Peru – 2024

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ABSTRACT

This research analyzes the regulatory regulation of heavy machinery and civil liability in cases of traffic accidents, according to Peruvian regulations. The study was developed through a qualitative approach, applying grounded theory as a methodological design and employing semi-structured interviews with judges, prosecutors and lawyers specialized in civil law, in addition to normative documentary analysis. The results reveal that the regulation of heavy machinery of the yellow line suffers from a regulatory fragmentation that compromises legal certainty, patrimonial traceability and the protection of third parties, by not requiring its mandatory registration with the National Superintendence of Public Registries (SUNARP) or providing uniform mechanisms of identification and control; therefore, this omission generates legal loopholes that hinder the effective intervention of the State and weaken the registry function as an instrument of legal publicity. It also concluded that, in view of the objective of analyzing the normative regulation of heavy machinery and civil liability derived from traffic accidents in Peru, it is stipulated that the current legal framework presents a serious inadequacy both in terms of registration and in operational and sanctioning matters, which weakens the capacity of the State to prevent accidents and guarantee adequate civil reparation to victims.

Keywords: Civil law, civil liability, traffic accident, transport safety, insurance, machinery.



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INTRODUCTION

Civil liability in law is understood as the obligation that falls on a person to repair the damage caused to another, either by action or omission; This is based on the principle of comprehensive reparation of damage and seeks to restore balance between the parties involved. Likewise, it is necessary to demarcate that this liability occurs both in the contractual and non-contractual spheres, and in both cases, the person who causes the damage is required to make economic reparation to the victim, based on two aspects, consequential damage and loss of earnings (Ayvar, 2020).

We must consider that heavy yellow line machinery, mainly used in construction, mining, and other industrial sectors, but also in rural and urban areas, has a direct impact on public safety due to its size and power (Paredes et al., 2022); being, in addition, that these machines are essential for the development of infrastructure projects, but, at the same time, they represent a high risk if they are not managed properly, since the improper use of this machinery can cause serious accidents, which not only affects the lives of

workers, but also the safety of the community in general (Agudelo et al., 2012). In this sense, the lack of adequate preventive measures, as well as the lack of knowledge of the risks inherent to their operation, can result in devastating consequences.

The lack of legislative regulation of heavy machinery to obtain the mandatory obtaining of essential documents such as the ownership card, the Compulsory Traffic Accident Insurance (SOAT) and registration in public registries, originates a legal vacuum that makes it difficult to assign responsibility in cases of accidents, this problem highlights the urgent need to establish a clear regulatory framework that guarantees responsibility and protection for both those affected and for owners of heavy vehicles. machinery.

This context was reflected in other countries, such as Colombia, where 75% of accidents in the construction sector are due to the use of machinery, in addition to factors such as unsafe acts, lack of training, absence of protective and distracting equipment (Paredes et al., 2022); in addition, in the aforementioned country,

Resolution No. 12335 of 2012 already establishes the obligation for all heavy machinery to have its registration card issued by the Ministry of Transport. For its part, in Ecuador, through the new Regulation of the National Registry of Equipment and Machinery, it also pointed out that the registration of all heavy machinery with the Ministry of Transport and Public Works is mandatory, and that these vehicles must subsequently carry their respective license plate (Ministry of Transport and Public Works, 2016).

In Peru there is still no regulation regarding the registration of heavy machinery of the yellow line, so much so that, in 2020, Deputy Santillana proposed a bill, in order to provide for the mandatory registration of these movable assets in SUNARP; However, this project was not approved, since the basis of the project was to generate security with respect to these goods, since there would be uncertainty about how to act with respect to them, even more so when in recent times heavy machinery has been involved in various traffic accidents.

In Uruguay, Moreno (2023), in his research with the aim of studying civil liability from the historical level, through a hermeneutical methodology, concluded that civil liability is mainly oriented towards the reparation of the damage caused, leaving in the background the function of punishing conduct from a moralizing perspective; However, fault has not been eliminated as a criterion for attributing responsibility, but has been replaced by damage as the central element of the analysis.

On the other hand, in Ecuador, (Pita & Bravo, 2024), in the research, aimed at explaining civil reparation in traffic accidents, based on an analytical method, it was concluded that the registered owner of a motor vehicle involved in a traffic accident can be considered jointly and severally liable when he has allowed or facilitated the driving of the same to a person whose negligent conduct has been decisive in the production of the accident. This responsibility does not derive only from the property bond, but also from the duty of diligence that falls on the owner at the time of ceding the use of his property, especially when there are indications or antecedents that allow us to foresee a potential risk in driving.

In Chile, Barrios (2024), in his research on the analysis of the distribution of non-contractual civil liability, using a descriptive methodology, concluded that the obligation in solidum stands as a clear manifestation of the principle of total liability in the field of civil law, particularly within non-contractual liability. Indeed, when the damage has been caused by a plurality of subjects, it is reasonable and legally appropriate for all those responsible to respond jointly and integrally, based on the solidarity regime.

For their part, Amaya and Colorado (2020) conducted a study aimed at the integration of Compulsory Traffic Accident Insurance (SOAT) and non-contractual civil liability policies, whose objective was to examine the

benefits associated with the combination of both coverages and their repercussions for citizens. To this end, databases of relevant entities such as forensic medicine, Asopartes, the National Police and the National Road Safety Observatory were consulted, compiling statistics on road accidents and vehicle theft, the study concluded that in Colombia, the absence of specific regulation regarding non-contractual civil liability policies allows insurers to autonomously define their coverage, although only 30% of users purchase this type of insurance annually.

Likewise, Sánchez (2023) in his research whose objective was to examine various aspects of the civil liability regime in traffic accidents, focusing on issues related to insurance mediation. To this end, Community regulations and, in particular, Spanish legislation were used as legal sources. Legislative Decree 8 of 2004, promulgated on October 29, establishes the liability regime in traffic accidents, differentiating between damage to persons and damage to material property. In the case of personal injury, the responsible agent can be exonerated only if some cause for exemption arises, such as the sole fault of the victim or a case of force majeure. On the other hand, if the damage is material, such as in a collision between cars where there are no injuries, Article 1902 of the Civil Code applies, which imposes civil liability for the damages caused. This liability regime is non-contractual and is based on proving the negligence of the agent and the causal link between his action and the damage. Thus, although the action, omission or negligence are common to both types of liability, their nature differs according to the regime applied: one is for fault in personal injury and the other is objective in damage to property.

For his part, Monterroso (2024), in his study on the comprehensive reparation of moral damage in the case of civil liability arising from accidents. This article examines compensation for moral damages in cases of civil liability arising from an accident. The nature of the damage is examined, addressing the concept of moral damage, its scope, reparation and assessment, with a focus on two main aspects: the verification or presumption of the existence of moral damages and the conditions that affect the causality of the result. In addition, the need to establish a legal regulation in this area is argued. The article also considers, as a guideline, the application of the LRCSCVM scale for the evaluation of personal injuries, including moral damage. Finally, it focuses on the criteria for adjusting compensation for moral damage in accidents, taking into account aspects such as complementary moral damage, moral damage resulting from pathological grief, moral damage caused by intentional conduct, as well as moral damage related to the severity and intentionality of the accident.

In the context of Peruvian legislation, Reynoso (2021) conducted a study to analyze the impact of the implementation of a preventive maintenance plan on the mechanical availability of white and yellow appliance machinery in a company in Pasco, during 2019. The research was carried out using a quantitative approach,

applying a specific methodology and an experimental design. To do this, a sample of eight teams was selected. The performance of the control group was analyzed during the months of October, November and December 2018, while the experimental group focused on evaluating the performance of the teams between January and March 2019. As a result of the research, it can be stated that the implementation of a preventive maintenance plan has a positive impact on mechanical availability.

Likewise, we found that Morales (2022), in his research on the responsibility of public bodies in workplace accidents involving employees of labour intermediation companies, addressed the problems within these bodies, pointing out an evident lack of regulation regarding workplace accidents in this type of company. The regulations in force in this area, specifically Law No. 27626 and its Regulations, established by Supreme Decree No. 003-2002-TR, show a significant discrepancy: the former does not mention public bodies at any time, which allows for multiple interpretations and, consequently, the lack of protection for workers who suffer occupational accidents. Given this reality, the question arises about the causes of this problem, whose relevance is considerable, since an effective solution could make it possible to establish joint and several liability for non-compliance with the minimum obligations that guarantee the control, safety and health of the worker. The latter is an essential component of any company or institution, given that human value and dignity are protected by our Constitution, which establishes that work is a fundamental right.

Finally, the general objective of the research was to analyze the regulatory regulation of heavy machinery and civil liability in cases of traffic accidents, Peru – 2024.

METHODS

Research Design

This research is of a basic type, which does not focus on urgent problems, but offers a theoretical basis that can serve as a basis for future studies Arias (2022)

The approach adopted was qualitative, since it allows understanding the reality from the perspective of the participants and the collection of theoretical data. (Denny & Weckesser, 2022). The research design was based on Grounded Theory, a flexible approach that allows for inductive discovery that starts from empirical reality to construct solid and contextualized theoretical explanations (Liu, 2022).

Study Participants

The scenario of the investigation was located in Peru, considering the country's legal and state guidelines. The sample was composed of 6 experts, including lawyers, judges, prosecutors and registry analysts, who contributed their experience and knowledge.

Techniques and procedures

Regarding the study techniques developed, the interview is widely used within qualitative research to obtain data

in a concrete way since it allows direct interaction with the participants and whose answers enrich the research process (Cornwall, 2024).

A documentary analysis was also carried out, as it can adopt both a descriptive and interpretative approach, in this sense, the interpretative nature of this type of analysis not only seeks to identify manifest patterns in the data, but also allows to unravel the underlying meanings that reflect the perceptions, values and experiences of the subjects studied (Lindgren et al., 2020).

Structured interviews were used as data collection instruments, which offered flexibility to adjust the questions according to the participants' answers, which allowed for richer and more detailed data, as it promotes greater reflection on the part of the interviewee and facilitates the exploration of subjective aspects, such as perceptions, values, and personal experiences (Moenandar et al., 2024).

The analysis of the data was carried out using the analytical analysis method, which allowed the identification of the investigated problem; allowing a deep and detailed understanding of the phenomena studied, which facilitated the exploration of underlying meanings and patterns in the data.

Ethical aspects

Finally, the ethical aspects established in the study branched out into the following stages: 1) Alignment with the international standards of citations and references, APA, in the corresponding edition, recognizing the authorship of third parties; 2) Application of the guidelines established by the university, as well as unrestricted respect for the internal regulations relating to researchers; 3) the observance of ethical principles, such as justice, autonomy, non-maleficence and beneficence.

RESULTS

Determine the regulatory regulation of heavy yellow line machinery in national legislation

As a result, the interviewed specialists argued that, within the framework of the Peruvian legal system, the regulation of heavy machinery of the yellow line evidences a notorious regulatory division that compromises legal certainty, civil and criminal liability, as well as the effective protection of third parties against traffic accidents, since the omission of mandatory registration in SUNARP prevents the proper identification of the owners. it hinders state control over their circulation and generates gaps that make it impossible to respond effectively to accidents, since they lack essential elements such as the license plate, the SOAT or the ownership card. This situation not only violates essential principles such as the traceability of assets and the public interest, but also weakens the registry function as a means of legal publicity. Consequently, a comprehensive legal reform is required as a priority to unify and strengthen the legal regime applicable to this type of special vehicles, establishing a mandatory registry, effective sanctions for non-

compliance, operating and traffic rules, as well as mechanisms that guarantee the protection of the victims' right to reparation.

Establish the criteria for determining civil liability in traffic accidents involving yellow line machinery.

With respect to this objective, it is concluded that such liability must be evaluated from a double perspective: objective and subjective. From the objective level, Article 1970 of the Peruvian Civil Code allows liability to be imputed without the need to prove fault, provided that the damage and its connection with the risk created by the use of a dangerously instrumental asset, such as heavy machinery, is verified. In this logic, illegality is configured from the improper or negligent use of equipment, especially when traffic rules, road safety or technical maintenance are violated. On the other hand, the operator's conduct, even without malice, may be considered unlawful if it introduces a legally disapproved risk that results in harm to the life, health, or property of others. However, subjective elements must also be considered, such as the degree of diligence of the operator, the existence of licenses, technical training and compliance with the obligations of the owner of the machinery, which allows possible cases of co-responsibility or partial exoneration to be weighed. In this sense, the lack of specific regulation does not prevent the application of the general principles of civil and criminal law, since a systematic interpretation of the legal system makes it possible to identify the general duties of care and prevention applicable to dangerous goods.

To study how comparative legislation regulates the registration of heavy machinery as movable property

In the field of comparative law, the legal treatment of the registration of heavy machinery as movable property presents significant nuances between Colombia, Ecuador and Uruguay. In Colombia, Resolution 0012335 of 2012 expressly establishes the mandatory registration of agricultural, industrial and self-propelled construction machinery in the RINT System, in order to generate state control over such movable property due to its relevance in the economic sphere and for reasons of legal certainty. This regulation is characterised by its administrative approach and its link to a centralised vehicle information system, which allows not only its identification and traceability, but also its link with fiscal, environmental and mobility aspects.

In contrast, Ecuador, through Regulation 079, also imposes the mandatory registration of heavy machinery in a national registry, but with a more accentuated sectoral orientation towards public works, by delegating this function to the Provincial Directorates of the Ministry of Transport and Public Works. This differentiation denotes a decentralised and functionalist approach, closely linked to the technical and operational control of the machinery used in civil infrastructure. For its part, Uruguay adopts a different regulatory approach, mainly regulating the safety and working conditions aspect of the use of machinery, in accordance with the guidelines of International Labour Convention No. 119. Although it does not establish a formal register of

machinery as in other countries, it does incorporate a regulation that recognizes the importance of machinery as movable property in the work context. These differences show not only the diversity of normative purposes, but also the multiplicity of regulatory, administrative, sectoral and labor approaches, which can coexist in the legal treatment of heavy machinery in Latin America.

Identify how Compulsory Traffic Accident Insurance is applied to heavy machinery

Through the interviews conducted, it was observed that the application of the Compulsory Insurance against Traffic Accidents (SOAT) to heavy machinery in Peru reveals a significant omission of the legal system in the effective protection of victims of accidents linked to this type of vehicle. The exclusion of this mechanism from the mandatory regime provided for in Law No. 27181 and its regulations creates a legal vacuum that violates fundamental rights such as personal integrity and access to expeditious reparation mechanisms. This regulatory vacuum, coupled with widespread misinformation and low adoption of alternative private insurance, perpetuates scenarios of impunity and lack of protection, especially for third parties outside the workplace. From a legal perspective, it is imperative to move towards the creation of a specific compulsory insurance regime for heavy machinery, either through the extension of the SOAT or an autonomous but analogous scheme, which guarantees a minimum, automatic and immediate coverage, in harmony with the principles of effective protection, legal certainty and comprehensive reparation. thus ensuring real and equitable protection against the risks inherent in its operation.

Analyze the regulatory regulation of heavy machinery and civil liability in cases of traffic accidents, Peru-2025

In order to analyze the normative regulation of heavy machinery and civil liability derived from traffic accidents in Peru, it is stipulated that the current legal framework presents a serious inadequacy both in terms of registration and in terms of operations and sanctions, which weakens the capacity of the State to prevent accidents and guarantee adequate civil reparation to victims. In this way, the heavy machinery of the yellow line, due to its nature and harmful potential, must be treated as a risk asset, which requires a specific regulatory regime that ensures its mandatory registration in SUNARP, the identification of the owner, the SOAT requirement, the possession of a property card, and the effective control of its use on public roads or high-traffic areas. In this sense, the absence of these requirements not only promotes impunity for the damage caused, but also violates fundamental principles such as legal certainty and the protection of the rights of third parties; In view of this, a comprehensive legislative reform is imperative that, in addition to unifying the dispersed regulations, incorporates criteria of both objective civil liability, for the risk created; and subjective, by the conduct of the operator, so as to ensure an adequate imputation.

DISCUSSION

By analyzing how the parameters of national legislation are certainly limited, it was possible to determine that within the framework of the Peruvian legal system, the regulation of heavy machinery with yellow lines evidences a notorious regulatory division that compromises legal certainty, civil and criminal liability, as well as the effective protection of third parties against traffic accidents. Since the omission of the mandatory registration in the SUNARP prevents the proper identification of the holders, hinders state control over their circulation and generates gaps that make it impossible to respond effectively to accidents, since they lack essential elements such as the license plate, the SOAT or the ownership card. Not only does this violate essential principles such as asset traceability and the public interest, but it also weakens the registry function as a means of legal publicity.

The result obtained coincides with what Monterroso (2024) stated, since it can be seen substantially that the problem lies essentially in the lack of regulation regarding heavy machinery with the yellow line; Meanwhile, it warns of the urgency of establishing a specific legal regulation in the face of the uncertainty generated by this type of vehicle.

As for the criteria for determining civil liability in traffic accidents involving yellow line machinery, it is observed that they must be evaluated from a double perspective: objective and subjective. From the objective level, Article 1970 of the Peruvian Civil Code allows liability to be imputed without the need to prove fault, provided that the damage and its connection with the risk created by the use of a dangerously instrumental asset, such as heavy machinery, is verified.

For his part, Moreno (2023) proposes a double assessment of liability: objective and subjective, since he points out that the duty to compensate does not necessarily require the existence of fault, but can be based on the risk generated by human activity; this is in line with Article 1970 of the Civil Code, which allows strict liability to be attributed when there is evidence of a causal link between the damage and the risk created.

From the perspective of the comparative regulation of the registration of heavy machinery as movable property, the result shows that Colombia, Ecuador and Uruguay adopt different legal strategies that respond to differentiated regulatory purposes: administrative, sectoral and labor, respectively. Unlike Pita and Bravo (2024), where the joint and several liability of the registered owner in a context of vehicular traffic is analyzed, it can be pointed out that although this study is based on a functional link between registered ownership and legal liability, the registration of heavy machinery in the systems examined fundamentally seeks the administrative or sectoral identification of the goods, without necessarily establishing similar mechanisms of direct liability.

We can indicate that, after analysing comparative legislation and our legislation, although it is true that they are different contexts, both the securities register as

a traceability tool, as well as its specific legal function and its regulatory purpose diverge substantially.

When contrasted with the general theory of administrative criminal law, a possible tension is observed between the nature of the administrative record of the regulations and their capacity to generate legal-criminal consequences in the event of non-compliance. In the Colombian case, the centralization of the registry in the RUNT could allow useful traceability for eventual imputations, if it is proven that the non-compliance affects the regulations aimed at safety. However, neither in Ecuador nor in Uruguay is there a clear articulation between the registration regime and a sanctioning system that directly links the omission of registration with affectations to criminally protected legal assets; Thus, in these contexts, administrative criminal theory appears to have limited or merely potential application. It is also essential to point out the importance of the application of the Compulsory Insurance against Traffic Accidents (SOAT) to heavy machinery in Peru, the lack of these reveals a significant omission of the legal system in the effective protection of victims of accidents linked to this type of vehicle. The exclusion of this mechanism from the mandatory regime provided for in Law No. 27181 and its regulations creates a legal vacuum that violates fundamental rights such as personal integrity and access to expeditious reparation mechanisms. This regulatory vacuum, coupled with widespread misinformation and low adoption of alternative private insurance, perpetuates scenarios of impunity and lack of protection, especially for third parties outside the workplace. The exclusion of heavy machinery from the scope of the Compulsory Insurance against Traffic Accidents (SOAT) in our legal system, the same as that generated by Article 6 of Supreme Decree No. 049-2000-MTC, evidences a regulatory omission that affects the victims.

Finally, we can demonstrate after analysis that the current legal framework is seriously inadequate both in terms of registration and in terms of operations and sanctions, which weakens the State's capacity to prevent accidents and guarantee adequate civil reparation to victims. In this way, the heavy machinery of the yellow line, due to its nature and harmful potential, must be treated as a risk asset, which requires a specific regulatory regime that ensures its mandatory registration in SUNARP, the identification of the owner, the requirement of the SOAT, the possession of a property card, and the effective control of its use on public roads or high-traffic areas

CONCLUSIONS

From the analysis carried out, it has been possible to determine that in Peru there is no regulatory regulation of heavy machinery of yellow line, which has a substantial interference in legal certainty, since there are no legal rules applicable to these goods, which allow determining their ownership, nor the applicable transit insurance, which is why it has not been possible to determine the criteria of civil liability in accidents of transit of machinery yellow line.

Likewise, in the comparative legislation studied we were able to appreciate that there is a certain regulation that regulates the mandatory registration of heavy machinery in a Registry of the Ministry of Transport, which in Peru has not yet been established, thus leaving a legal vacuum with respect to the use and consequences in case of traffic accidents. Compulsory traffic accident insurance is not effectively applicable to heavy machinery, because its own regulations, Supreme Decree No. 049-2000-MTC "National Regulations on Civil Liability and Compulsory Insurance for Traffic Accidents", do not contemplate these assets as insurable vehicles within its structure, while establishing that the effects of the aforementioned regulation are only included in vehicles with license plates.

In Peru there is no regulatory regulation of heavy machinery, and this means that in the event of an accident it is not possible to determine liability, since the lack of a specific regime for heavy machinery of the yellow line, added to the absence of mandatory requirements such as registration in SUNARP, SOAT and the ownership card, it weakens the civil liability system.

Faced with this problem, it is necessary for the Congress of the Republic to reform the Civil Code to include a specific provision on liability for the operation of heavy machinery, expressly recognizing the figure of risk activity, a specific law is needed that establishes the mandatory registration of all heavy machinery of the yellow line as movable property before SUNARP. under a differentiated and technical regime.

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