



# Revista Científica del Centro Universitario de la Guardia Civil

# Revista *LÓGOS* Guardia Civil

**Road Safety:**  
from Strategy to the conduct  
of Road Safety Units

**number 2**  
january 2024







## INDEX

INTRODUCTION ..... 367

### I.- COLLABORATIONS

Need for a specialised road safety prosecutor's office ..... 371  
*Luis del Río Montesdeoca*  
 Praxis of the offence of fleeing the scene of an accident in art. 382 bis criminal code (organic law 2/2019 of 1 March 2019 and organic law 11/2022 of 13 September)..... 409  
*Vicente Magro Servet*

### II.- RESEARCH WORKS

The breach of vehicle immobilisations on interurban roads in Cantabria ..... 431  
*Sergio García Palacín*  
 Criminological aspects of road safety technical criminological reports ..... 457  
*Isaac Llorente Blanco*  
 Prevalence and criminological aspects of alcohol and other drug use in drivers tested in urban settings during the coronavirus pandemic. .... 475  
*Iván Marcos Ortiz; Josefa Muñoz Ruiz; Eduardo Osuna Carrillo de Albornoz*  
 Crimes of manslaughter and reckless injury committed with a motor vehicle or moped ..... 499  
*Rocío Martín Ríos*  
 Serious road accidents on interurban roads in the Region of Murcia involving foreign drivers ..... 523  
*José Javier Martínez Martínez*  
 Risks associated with interventions in road traffic accidents involving electric vehicles ..... 547  
*José Antonio Mérida Fernández*  
 PMV micromobility on urban roads ..... 573  
*Pedro José Molina García*  
 Special public roads operations with a speed limit of up to 50 km/h. Analysis, review and update of the procedure ..... 603  
*Alberto Page de la Azuela*

The future in the investigation and reconstruction of road accidents. The E.D.R. (Event Data Recorder) device and its application to help reduce accidents..... 629  
*Ricardo Serrano de Andrés*

Protected legal rights in offences against road safety: towards a model of systemic functionalism ..... 653  
*Marco Teijón Alcalá*

### III.- REVIEW OF CASE LAW

Review of case law 2th Chamber of the Supreme Court ..... 677  
*Javier Ignacio Reyes López*



## INTRODUCTION

Dear readers,

It is a pleasure to welcome you to this new edition of our scientific security magazine. On this occasion, we present a series of articles that address highly relevant and current topics in the field of road safety and its related legislation. After the rigorous review process to which the scientific articles we receive are subjected, a total of ten articles have finally been selected to make up this number 2, entitled "Road Safety: from Strategy to the conduct of Road Safety Units".



We start the magazine with the collaborations section. In this edition we have two collaborators: Luis del Río Montesdeoca, distinguished Court Prosecutor and Road Safety Coordinator, who offers us an insightful analysis on the need for a Specialized Prosecutor's Office in Road Safety; and Vicente Magro Servet, eminent Judge of the Supreme Court and Doctor of Law, who presents his exhaustive study on the practice of the crime of fleeing from the scene of the accident.

In the research section, we present a series of studies that address various aspects of road safety. We begin with the author Sergio García Palacín, Lieutenant of the Guardia Civil and Head of the Torrelavega Traffic Detachment, who offers us a meticulous study on "the breaking of vehicle immobilizations on the interurban roads of Cantabria." Alberto Page de la Azuela, Second Lieutenant Cadet of the Guardia Civil and graduate in Security Engineering from the Carlos III University of Madrid, presents his detailed work on "operational devices on public roads with a speed limit of up to 50 km/h".

Ricardo Serrano de Andrés, also a Second Lieutenant Cadet of the Guardia Civil and a graduate in Security Engineering, offers us a futuristic vision in the investigation and reconstruction of road accidents with his article on "the E.D.R device (Event Data Recorder) and its application to help on reducing accidents." Next, Isaac Llorente Blanco,

1st Corporal of the Guardia Civil and Motorist specialist of the Traffic Division, offers us his innovative vision on "criminological aspects of road safety."

José Javier Martínez Martínez, Lieutenant of the Guardia Civil and Technical Specialist in Management Information Technology, offers us an analysis of the "serious road accidents on interurban roads in the region of Murcia with the involvement of foreign drivers." Pedro José Molina García, Malaga Local Police Officer and Master in Road Safety from the Guardia Civil University Center, presents his study on "VMP micromobility on urban roads".

Marco Teijón Alcalá, from the Universidad Nacional de Educación a Distancia (UNED), offers us his vision of "the protected legal asset in crimes against road safety: towards a model of systemic functionalism." Iván Marcos Ortiz, Local Police of Santander and Doctor in Criminology, together with Josefa Muñoz Ruiz, Professor of Criminal Law at the University of Murcia, and Eduardo Osuna Carrillo de Albornoz, Professor of Legal and Forensic Medicine at the University of Murcia, offer us a study on "prevalence and criminological aspects of the consumption of alcohol and other drugs in drivers subjected to detection tests in urban areas during the coronavirus pandemic."

We have an article by José Antonio Mérida Fernández, Provincial Chief of Traffic of Zaragoza, in which he presents his pioneering study on "risks associated with intervention in road accidents involving electric vehicles." In addition, we have the participation of Rocío Martín Ríos, Prosecutor Attached to the Road Safety Prosecutor's Office of Andalusia, Ceuta and Melilla, who offers us an analysis of the crimes of homicide and reckless injuries committed with a motor vehicle or moped.

In the jurisprudence review section, Javier Ignacio Reyes López, Magistrate Judge of Instruction No. 1 and Dean of Alcalá de Henares, offers us a jurisprudence review of the 2nd Chamber of the Supreme Court.

We hope that these articles are of interest to you and provide a valuable and updated vision of the challenges and opportunities in the field of road safety, contributing to the discussion and progress in the field. We thank all the authors and collaborators for their dedication and effort in producing these high-quality works, as well as the reviewers and members of the Editorial Board and the Scientific Committee who have made it possible for this new edition to come to light.

We hope you enjoy our magazine.

*Francisco Díaz Alcantud*  
*CUGC Director*



## I.- COLLABORATIONS





**Luis del Río Montesdeoca**  
Safety road Prosecutor Coordinator

## **NEED FOR A SPECIALISED ROAD SAFETY PROSECUTOR'S OFFICE**





## NEED FOR A SPECIALISED ROAD SAFETY PROSECUTOR'S OFFICE

**Summary:** 1. SPECIALISATION WITHIN THE PROSECUTION SERVICE 2. ROAD SAFETY COORDINATION PROSECUTOR. STATE ATTORNEY GENERAL'S ROAD SAFETY UNIT 3. FUNCTIONS OF THE ROAD SAFETY COORDINATING PROSECUTOR 4. SPECIALISED SECTIONS IN EACH REGIONAL PROSECUTOR'S OFFICE. DEPUTY PROSECUTORS 5. STATISTICS. 2023 STATE ATTORNEY GENERAL REPORT AND 2022 DEPARTMENT OF TRANSPORT ROAD ACCIDENT BALANCE SHEET 6. 2030 ROAD SAFETY STRATEGY 7. GENERAL MATTERS IN RELATION TO THE PRESENT AND FUTURE OF ROAD SAFETY 8. THE IMPORTANCE OF ROAD SAFETY 9. VICTIMS 10. CONCLUSIONS

**Resumen:** El tema de este trabajo es responder a la siguiente pregunta: ¿es necesario una Fiscalía especializada en seguridad vial?

Para ello abordamos la especialización del Ministerio Fiscal, introducida en nuestro ordenamiento jurídico por la Ley 24/2007.

La seguridad vial es un aspecto importante en la vida cotidiana de todos los ciudadanos. Todos los esfuerzos son pocos para luchar contra esta lacra que supone un coste humano y social intolerable, máxime en una sociedad como la nuestra con el desarrollo científico y tecnológico del que dispone. Incluso en términos económicos el coste es elevado.

Así mismo, analizamos diferentes datos estadísticos y cuestiones sobre el presente y el futuro de la seguridad vial.

Sin olvidar una referencia a las víctimas que juegan un papel esencial y deben tener la oportunidad de ser escuchadas.

Finalmente, incluimos unas breves conclusiones de todo lo expuesto anteriormente para intentar contestar a lo planteado en el trabajo.

**Abstract:** This paper aims to answer the following question: is there a need for a specialized Public Prosecutor's Office for road safety?

For this purpose, I analyze the specialization of the Public Prosecutor's Office introduced into our legal system by Act 24/2007.

Road safety is an important aspect of everyday life for all citizens. All efforts are not enough to combat this scourge, which involves an intolerable human and social cost, especially in a society such as ours with the scientific and technological development at its disposal. Even in economic terms, the cost is high.

Likewise, we analyze different statistical data and questions about the present and future of road safety.

We cannot forget a reference to the victims, who play an essential role and must have the opportunity to be heard.

Finally, we include some brief conclusions on the above-mentioned points to answer the questions raised in the paper.

**Palabras clave :** delitos contra la seguridad vial, vehículo a motor, conductor, riesgo, víctima.

**Keywords:** road safety offences, motor vehicle, driver, risk, victim.

## 1. SPECIALISATION WITHIN THE PROSECUTION SERVICE

As we know, the constitutional model of the Public Prosecutor's Office<sup>1</sup> establishes the basic principles of legality and impartiality. These principles are absolutely unquestionable in a democratic society. It also sets out the principles of unity of action and hierarchical reporting<sup>2</sup>, which are subordinate to the aforementioned principles.

The principle of unity of action of the Public Prosecutor's Office<sup>3</sup> has, in turn, been linked to the principle of equality before the law (Articles 1.1 and 14 of the Spanish Constitution) and to the principle of legal certainty<sup>4</sup> (Article 9.3 of the Spanish Constitution), which are essential in the rule of law. In turn, hierarchical reporting must be understood as an instrumental principle at the service of unity of action.

It is on the basis of these basic principles that sets the groundwork for a fully democratic Public Prosecutor's Office at the service of society, thereby overcoming any authoritarian vestiges of yesteryear.

Returning to the principle of unity of action, this principle seeks a unitary interpretation and application of legal rules in the different courts (which is in the general interest of the highest level) thereby achieving the minimum and necessary certainty of the legal system<sup>5</sup>.

When applied, rules may give rise to different and even contradictory interpretations between different court authorities in the same or different regions. This is often particularly relevant in cases dealing with new realities (e.g. road safety, personal mobility vehicles<sup>6</sup>, for example) or recent legal reforms.

---

<sup>1</sup> Art. 124.2 of the Spanish Constitution establishes the following: "The Public Prosecutor's Office exercises its functions through its own bodies in accordance with the principles of unity of action and hierarchical reporting and subject, in all cases, to the principles of legality and impartiality. This is reiterated in Art. 22 Organic By-Laws of the Public Prosecutor's Office.

<sup>2</sup> The preamble of the Regulations of the Public Prosecutor's Office, approved by Royal Decree 305/2022 of 3 May, describes the principles of unity of action and hierarchical dependence as organic principles, and the principles for the defence of legality and impartiality as functional principles.

<sup>3</sup> The principle of unity of action is developed in Chapter II of Title II of the Organic By-Laws of the Public Prosecutor's Office, which is entitled "On the unity of action and reporting by the Public Prosecutor's Office".

<sup>4</sup> As Constitutional Court Ruling No. 44/2023 of 9 May points out, "the principle of legal certainty provided for in art. 9.3 of the Spanish Constitution has been understood by this court as certainty about the applicable legal system and the legally protected interests, seeking "clarity and not confusion of rules" (Constitutional Court Ruling No. 46/1990, of 15 March, Court Consideration 4); as well as "the citizen's "reasonably founded expectation as to what the actions of the authorities in the application of the law should be" (Constitutional Court Ruling No. 36/1991, of 14 February, Court Consideration 5)". In turn, Instruction 11/2005 refers to legal certainty as "the possibility of a reasonably certain a priori estimate of the manner and sense in which the Courts will apply legal rules".

<sup>5</sup> Instruction 11/2005, on the effective instrumentalisation of the principle of unity of action established in Art. 124 of the Spanish Constitution, indicates that "the certainty of the legal system is, therefore, a guarantee of legal certainty, of equality before the law for citizens and of freedom, and does not merely pursue an individual interest".

<sup>6</sup> An extensive study on European, state and municipal regulations can be found in GARCÍA-VALLE PÉREZ, M., *La responsabilidad por daños en accidentes con patinetes eléctricos*, Atelier, 2022.

We cannot overlook the important reforms that have taken place in relation to this matter:

Organic Law 15/2003, of 25 November, amending Arts. 152, 379, 381, 382 of the Criminal Code.

Organic Law 15/2007, of 30 November, affecting Arts. 379, 380, 381, 382, 383, 384, 385 and the heading of Chapter IV, Title XVII, Book II.

Organic Law 5/2010, of 22 June, amending Arts. 379, 381, 384 and introducing Arts. 385a and b

Organic Law 1/2015, of 30 March, affecting Articles 142 and 152 of the Criminal Code.

Organic Law 2/2019, of 1 March, amending Articles 142, 152 and 382 and introducing Arts. 142 bis, 152 bis and 382 bis of the Criminal Code.

Organic Law 11/2022, of 13 September, amending Arts. 142, 152 and 382 bis of the Criminal Code.

As well as the innumerable Circular Notices, Instructions and Consultations issued by the State Attorney General that also refer to this matter, including but not limited to:

Firstly, among those directly affecting the matter in hand, Circular 10/2011, on criteria for the unity of specialised action of the Public Prosecutor's Office in matters of Road Safety.

In addition to Instruction 3/2006, on criteria for action by the Public Prosecutor's Office for the effective prosecution of criminal offences related to the circulation of motor vehicles.

Finally, Consultation 1/2006, on the legal-criminal qualification of driving motor vehicles at extremely high speeds.

More incidentally, the following also address road safety issues:

Circular Notice 1/2019, on common provisions and security measures for technological investigation proceedings in the Criminal Prosecution Law, and Circular Notice 2/2019, on the interception of telephone and telematic communications<sup>7</sup>.

Circular 4/2019, on the use of technical devices for image capturing, tracking and tracing<sup>8</sup>.

---

<sup>7</sup> These deal respectively with matters including but not limited to provisions common to technological research and with traffic data research. In road accidents, the driver's traffic data can demonstrate that their mobile phone was being used at the same time as the accident or immediately before.

<sup>8</sup> This should be taken into account in relation to the possible recording of images revealing external signs during drug tests.

Circular 1/2015, on guidelines for the exercise of criminal action in relation to minor offences following the criminal reform operated by Organic Law 1/2015.

Circular 3/2015, on the transitional system following the reform implemented by Organic Law 1/2015.

Circular 9/2011, on criteria for the unity of specialist action by the Public Prosecutor's Office in matters of juvenile reform<sup>9</sup>.

Circular 3/2010, on the transitional system applicable to the reform of the Criminal Code implemented by Organic Law 5/2010 of 22 June.

Instruction 8/2005, on the duty of information in the protection of victims in criminal proceedings.

Circular 1/2003 on the procedure for the rapid and immediate prosecution of certain crimes and misdemeanours and amending the abbreviated procedure.

Others correspond to organisational aspects of the speciality in the different Prosecutor's Offices:

Instruction 5/2007, on Prosecutors responsible for Coordinating Workplace Accidents, Road Safety and Alien Affairs and on the respective Sections of the Regional Prosecutor's Offices.

Instruction 5/2008, on the adaptation of the system for the appointment and status of the Delegates of the specialised sections of the Public Prosecutor's Offices and the internal system of communication and relations with the delegated areas of specialisation following the reform of the Organic By-Laws of the Public Prosecutor's Office (hereinafter EOMF) by Law 24/2007 of 9 October.

Instruction 1/2015, on issues in relation to the functions of the Coordinating Prosecutors and Deputy Prosecutors.

Instruction 11/2005 on the effective implementation of the principle of unity of action established in Art. 124 of the Spanish Constitution.

Instruction 1/2014 on the reports of the bodies at the Public Prosecutor's Office and the State Attorney General.

Instruction 1/2018 on the publicity of the statistical data of the Reports.

Furthermore, the traditional cognitive limitation of the appeal for reversal did nothing to help to improve the situation either. However, Law 41/2015, of 5 October, together with the amendment of the second instance in criminal matters, remodelled the reversal for it to effectively fulfil its function of unifying criminal doctrine. Offences that could

---

<sup>9</sup> It deals, amongst other issues, with legal aid at police stations for minors arrested in relation to road safety offences.

not previously be subject to such an appeal can now be appealed in court, thus unifying the criteria for the interpretation of different types of criminal offences. This will undoubtedly contribute to improving the implementation of constitutional values such as equality before the law and legal certainty. The agreement of the non-judicial Plenary Session of Chamber II of the Supreme Court of 9 June 2016 issued an agreement on the unification of criteria on the scope of the reform of the Criminal Prosecution Law. It is worth noting that one of the criteria they approve states that "appeals must be for reversal. Those lacking such an interest must be inadmissible (Art. 889, paragraph 2), it being understood that the appeal is for reversal, pursuant to the statement of grounds:

- (a) whether the ruling under appeal is openly contrary to the case-law of the e Court,
- b) if it resolves questions on which there is contradictory case law of the provincial courts,
- (c) if it applies rules that have not been in force for more than five years, provided that, in the latter case, there is no established Supreme Court case law relating to earlier rules of the same or similar content.

As indicated in *Instruction 11/2005 on the effective implementation of the principle of unity of action established in Art. 124 of the Spanish Constitution*, the mission of promoting the action of Justice in the defence of legality, citizens' rights and the public interest protected by law that Article 124 of the Constitution attributes, as well as the broad legitimisation that the legal system grants to it, place the Public Prosecutor's Office in a particularly suitable position to promote the creation of case law criteria that overcome inequalities and their application in all jurisdictional bodies. This requires unity of action which, in turn, implies unity of criteria.

The complexity of the legal system and of the problems arising from its application calls for the need for specialisation in order to articulate the principle of unity of action, in addition to the traditional mechanisms (circulars, instructions, consultations and orders of the State Attorney General). In this sense, State Attorney General Instruction 5/2008 indicates that "the promotion of the specialisation of prosecutors, as a requirement resulting from the complexity of the law and as an almost indispensable means of reinforcing the principle of unity of action, guaranteeing legal certainty (...) has been a constant in the legislative reforms and in the Instructions of the State Attorney General's Office in recent years".

In short, for this task of promoting the creation of case law criteria that overcome inequalities and their application in all court bodies, to which we referred earlier, to be successful and, therefore, to be taken on by the courts, it is essential that legal specialisation - criminal and extra-criminal - and in matters outside the law, but connected with the specialist field, and even dialectic (basic for the presentation, orally or in writing, of our arguments in a reasoned manner against those of the other parties, given the role played by the principle of contradiction in our Procedural Law<sup>10</sup>), is essential.

---

<sup>10</sup> Constitutional Court Ruling No. 48/2008, of 11 March, points out that "the principle of contradiction in criminal proceedings, which makes possible the dialectic confrontation between the parties, thus allowing the knowledge of the arguments of the opposing party and the manifestation before the Judge or Court of their own".



Although the process had begun earlier, it was from 2007 onwards that specialisation gained significant traction at the Public Prosecutor's Office to the point that the objective was set for it to form a substantial part of its organisational structure.

As stated in the Explanatory Memorandum to Law 24/2007, of 9 October, *amending the Organic By-laws of the Public Prosecutor's Office*, "in order to achieve greater efficiency in the actions of the Public Prosecutor's Office, the decision has been taken to give greater impetus to the principle of specialisation as a response to the new types of offences that have emerged in recent times. (...)

## **2. ROAD SAFETY COORDINATION PROSECUTOR. STATE ATTORNEY GENERAL'S ROAD SAFETY UNIT**

As a result of this specialisation, the specialist Units of the State Prosecutor's Office have been created, each headed by a Prosecutor, as well as the specialised sections in each Prosecutor's Office, as we shall see.

Law 24/2007, as is clear from its content and Statement of Reasons, sought to reinforce the autonomy of the Public Prosecutor's Office, its reorganisation in accordance with the State of the Autonomous Regions - reorganising its geographical location - and its specialisation. With regard to the latter, which is what is of interest in this paper, the aim was for the Public Prosecutor's Office to have the same degree of specialisation in any part of Spain.

The Statement of Reasons points out that another of the new developments was the creation of the State Attorney General's Delegate Prosecutors, thereby relieving the Attorney General of tasks and facilitating the assumption by these Delegate Prosecutors of responsibilities in matters of coordination and the issuing of criteria through the proposal to the Attorney General of circulars or instructions that they consider necessary, a task which, from the point of view of unity of action, is better covered given their degree of specialisation and experience.

This reform rewords, among others, Articles 20 and 22.3 of the Organic By-Laws of the Public Prosecutor's Office. Article 20(3) shall read as follows:

"There shall also be, in the State Attorney General's Office, Specialist Prosecutors responsible for the coordination and supervision of the activity of the Public Prosecutor's Office (...) as regards other matters in which the Government, at the proposal of the Minister of Justice, having heard the State Attorney General, and subject to a report, in any case, from the Public Prosecutor's Council, considers it necessary to create such posts. The aforementioned Prosecutors shall have powers and exercise functions similar to those provided for in the preceding sections of this article, within the scope of their respective specialities, as well as those that may be delegated to them by the State Attorney General, all notwithstanding the powers of the Chief Prosecutors of the respective regional bodies".

In fact, as regards the specialist Prosecutors it is possible to distinguish between Deputy Prosecutors and Coordinating Prosecutors<sup>11</sup>.

As indicated in State Attorney General Instruction No. 1/2015, *on matters regarding the functions of the Coordinating Prosecutors and Deputy Prosecutors*, "following the 2007 reform, the specific area of action of the Coordinating Prosecutors is regulated in Art. 20 of the EOMF, which expressly refers to the Prosecutor for Violence against Women, the Prosecutor for the Environment and the Prosecutor for Minors. Art. 20.3 of the EOMF leaves open the possibility of creating other posts for Coordinating Prosecutors". The post of Road Safety Prosecutor should be placed within the scope of Article 20.3 of the EOMF. "Alongside the Coordinating Prosecutors are the Deputy Prosecutors, whose legal framework consists of the provisions of section three of Article 22 of the EOMF, according to which the State Attorney General may delegate functions related to matters within their competence to Prosecutors.

Royal Decree 709/2006, of 9 June, *which establishes the staffing structure of the Public Prosecutor's Office for 2006*, creates the post of Coordinating Prosecutor for Road Safety, together the post of Coordinating Prosecutor for Alien Affairs. As the Statement of Reasons indicates, this is an area in which the sensitivity of Spanish society has increased considerably "taking into account, on the one hand, that certain unlawful conducts related to the traffic and circulation of motor vehicles are worthy of criminal treatment and, consequently, of public prosecution, especially when such elementary rights as the life or physical integrity of persons or damage to property are violated".

State Attorney General Instruction No. 11/2005, of 10 November, *on the effective implementation of the principle of unity of action established in Article 124 of the Spanish Constitution*, deals with the figure and functions of the State Attorney General's Delegate Prosecutors in certain matters, but does not refer to the position of the Road Safety Coordinator Prosecutor, which had not yet been created.

State Attorney General Instruction No. 5/2007 *on the Workplace Accident, Road Safety and Foreign Affairs Coordinator Prosecutor and on the respective sections of the regional prosecutor's offices*, will address questions on the organisation and operation of the speciality of Road Safety, as well as two other specialities (Workplace Accidents and Foreign Affairs). Among other aspects, it analyses the relations between the Coordinating Prosecutor, the specialist Delegates in each territory and the Chief Prosecutors of each prosecutor's office.

As indicated in the aforementioned Instruction, "the unification of criteria for action in the repression of criminal road traffic offences must constitute an effective mechanism for the correct exercise of the prosecutorial function, seeking a proportionate, dissuasive and effective response to this crime which, due to the very serious consequences it causes, cannot be devalued by a certain feeling of impunity, relaxation in the profiling of criminal

---

<sup>11</sup> *Vid.*, more extensively, the different types of specialist Prosecutors, CRESPO BARQUERO, P., "La reforma orgánica del Ministerio Fiscal: Fiscalía General del Estado. Institutional relations and central bodies", *Summer School of the Public Prosecutor's Office, 2014*, at <https://www.cej-mjusticia.es/sede/publicaciones>, p. 35-38.

offences, or the adoption of restrictive criteria in the classification of certain conducts committed in its sphere".

### 3. FUNCTIONS OF THE ROAD SAFETY COORDINATING PROSECUTOR

State Attorney General Instruction no. 11/2005<sup>12</sup>, as indicated, did not include road safety among the specialised areas, although it was referred to in Instruction 5/2007, *on Prosecutors responsible for Coordinating Workplace Accidents, Road Safety and Alien Affairs and on the respective Sections of the Regional Prosecutor's Offices*.

However, section V of State Attorney General Instruction no. 11/2005 establishes a series of general provisions aimed at specialist Prosecutors, which are also applicable to the Prosecutor for Road Safety Coordination (Instruction 5/2007, section III).

New functions deriving from State Attorney General Instruction no. 1/2015 must also be added, without forgetting Circular 10/2011, of 17 November, *on criteria for the specialised action unit of the Public Prosecutor's Office in matters of Road Safety*.

The functions can be divided as follows:

#### A) Coordination functions

- Coordination and supervision of the specialised Sections of the Territorial Prosecutor's Offices, gathering the appropriate reports and guiding, by delegation of the State Attorney General, the Network of Specialised Prosecutors, as a forum for the exchange of information and dissemination of criteria for action throughout the national territory.

- Within these powers, it is worth highlighting the supervision of indictments and sentences handed down for crimes within the speciality resulting in homicides or particularly serious injuries, especially spinal cord and brain injuries, (generally crimes of homicide and reckless injuries), without prejudice to the fact that the Prosecutor of the Chamber may extend it to other reports, as well as the possibility, also included in the Instruction, that the regional Prosecutor's Offices may send other reports for examination due to their special social repercussion or legal transcendence.

In general, the acts of the Public Prosecutor's Office must comply, from a substantive perspective, with the necessary requirement of motivation (proportionate to the entity of the act) and from a formal perspective, with basic minimum requirements of neatness, clarity and intelligibility, which will benefit the prestige and credibility of the Institution (Instruction 1/2005, of 27 January, *on the form of the acts of the Public Prosecutor's Office*). This is all the more so in the case of written pleadings, given their importance in criminal proceedings.

---

<sup>12</sup> However, the importance of the matter and of unifying criteria is highlighted in Consultation 1/2006, of 21 April, *on the legal-criminal qualification of driving motor vehicles at extremely high speeds*, and Instruction 3/2006, of 3 July, *on criteria for action by the Public Prosecutor's Office for the effective prosecution of criminal offences related to the circulation of motor vehicles*.

This supervisory function is connected to the need to consolidate a system of individualised control and monitoring of particularly relevant cases handled by the specialisation.

This supervisory function must be extended to the knowledge and analysis of the court's response to the Prosecutor's claims (especially sentences), in order to be able to assess the sense and degree of coincidence of the response with the Prosecutor's requests and the possibility of lodging the corresponding appeals.

The exercise of this monitoring function shall be documented by the specialised unit in the form of monitoring files.

- In relation to the supervisory functions, to the event that a Coordinating or Deputy Prosecutor detects non-compliance in excess of the above, they will communicate this directly to the Prosecutorial Inspectorate, for the corresponding purposes. They may report aspects that should receive priority attention during inspections to the Inspectorate.

In turn, Senior Prosecutors and the Public Prosecutor's Inspectorate will inform the Coordinating Prosecutor of the problems and incidents detected in the course of the inspections carried out in relation to the specialist field.

- As an example of the dissemination of information among the members of the network, worth mention is the preparation of case law summaries on the subject by the Coordinating Prosecutor, which will be sent to all the Delegates of the specialist field. The regional delegates, in turn, must transfer the most significant resolutions on the matter to the specialised unit (Instruction 1/2015).

- Investigation of matters of special importance assigned to them by the State Attorney General, processing the corresponding investigative proceedings, participating directly (or through delegates) in the procedure at its different stages and bringing the appropriate actions. This is an exceptional possibility.

- As regards appeals, the Coordinating Prosecutors will inform the Prosecutors of the Supreme Court of any appeals for reversal which, in relation to the specialist field, are prepared by the regional Prosecutor's Offices and which, due to their content or technical-legal approach, require the appropriate coordination of criteria with the Supreme Court Prosecutor's Office. In any case, when the Supreme Court Prosecutors note that the position to be adopted by the Supreme Court Prosecutor's Office, when responding to an appeal lodged by the other parties, may contradict the criteria for action defined by the Road Safety Unit, they shall inform the Coordinating Prosecutor in order to jointly assess the application of these criteria (Instruction 5/2008).

#### B) Functions related to the unification of criteria

- Propose to the State Attorney General as many Circulars and Instructions as it deems necessary, as well as proposals for the resolution of Consultations that arise on matters within its remit. They shall also prepare the corresponding drafts of such Circulars, Instructions or resolutions of Consultations.

- Drafting of opinions<sup>13</sup>.

The Public Prosecutor will directly resolve informal enquiries submitted to them on matters within their jurisdiction, informing the State Attorney General accordingly. Depending on the nature of the matter, the Coordinating Prosecutor may choose between issuing an opinion which will be sent to the State Attorney General or drawing up a draft resolution for consultation which will be sent to the State Attorney General.

In the opinions, it will set out its position in response to enquiries from a particular prosecutor's office, which will not be binding, but will be indicative. If it is considered necessary to make them binding, a proposal for an Instruction, Circular or Consultation should be filed.

C) Training

Instruction 5/2007 provides, on the one hand, that (with a view to developing criteria for the unification of actions among the Delegates and Sections) the Prosecutor should hold regular meetings, specialised courses, draw up a guide for the actions of these Prosecutors, and exchange, publish and disseminate the annual activities of the Road Safety Prosecutors. Furthermore, it must propose permanent training courses for Prosecutors on matters within their specialist field and intervene in the coordination of these courses.

The Organic By-Laws of the Public Prosecutor's Office and the Public Prosecution Regulations (RMF) also refer to the training of Deputy Prosecutors. Article 22.3 of the Organic By-Laws of the Public Prosecutor's Office states that "Prosecutors may (...) participate in determining the criteria for the training of specialist prosecutors".

In the same legal text, Art. 18.3 indicates, in relation to the sections, that preference will be given to those who have specialised in the subject due to previous functions performed or courses imparted or passed.

In turn, Article 62 of the RMF states that, with regard to the appointment and dismissal of Specialist Deputy Prosecutors, that "in order to fill these positions, preference will be given to having received specific training in the area of the speciality and having practical experience".

Instruction 1/2015 further clarifies these provisions.

With regard to the subjects covered by areas of specialisation, the opinion and suggestions of the Coordinating Prosecutor should be sought when planning initial and continuing training, as he is in the best position to identify training needs and to set priorities.

---

<sup>13</sup> Pursuant to Instruction 1/2015, the Opinion is divided into three parts: the statement of the issue raised, the legal analysis of the issue, and one or more conclusions. In addition, they shall be recorded using sequential numbering with reference to the year and shall be headed by a title indicating the issue in question.

Likewise, the Coordinating Prosecutor should be taken into account when selecting teaching staff, taking into account the type of training that, in each case, is sought.

- Lead the speciality deputy prosecutor workshops, which must necessarily deal with new legislative developments and whose conclusions may constitute hermeneutical guidelines.

The joint analysis makes it possible to share experiences in relevant aspects such as the internal organisation of the service; the staff and material resources available; the relationship with other specialised services or with other bodies of the Public Prosecutor's Office itself; the mechanisms established for the identification, control and monitoring of cases, visas, control of sentences, participation in the preparation of appeals for reversal, etc., or relations with regional police forces or with other bodies or institutions.

The conclusions of the Delegate Prosecutor Workshops for the specialist field must be endorsed by the State Attorney General. Although they cannot be conceived as an indirect way of innovating the State Attorney General's doctrine (Circulars, Instructions and Consultations), they can constitute a guide, guidelines, hermeneutic directives that orient prosecutors and be the origin of criteria reflected in the State Attorney General's doctrine. They may also incorporate proposals for legislative reforms that are then included in the Report.

#### D) Participation in meetings

- Chairing, where appropriate, the Meetings of Chief Prosecutors that the Chief Prosecutor of the High Court of Justice may convene as the hierarchical superior to establish positions or maintain the unity of criteria on matters of the speciality in which the Delegates of the respective Sections participate.

- Participate in the meetings of Senior Public Prosecutors when issues relating to the speciality are discussed (Instruction 1/2015 in relation to Art. 16(2) of the EOMF).

#### E) Preparing a section of the Report

-Development of a specific section in the Annual Report by the State Attorney General in which the problems encountered in the field are analysed, to provide an overview of the evolution of the activity of the speciality throughout the national territory.

Consideration shall be given to Instruction 1/2014, *on the reports of the bodies of the Public Prosecutor's Office and the State Prosecutor's Office*.

#### F) Statistics

Adoption of measures aimed at improving statistics.

#### G) Proposed reforms of services

With a view to encouraging the active intervention of the Public Prosecutor's Office in the launch, investigation and subsequent follow-up of legal cases aimed at investigating the corresponding offences and ensuring a fluid relationship with the Administration.



## H) Institutional

- General coordination in each of the corresponding areas, with the competent authorities and bodies of the different Administrations.

- Promote and participate in the adoption of Protocols and Agreements for coordination and collaboration with other bodies involved in the prevention, eradication and prosecution of crimes in this specialist field.

- Receive, answer and follow up on those letters sent to the State Attorney General by citizens, associations and institutions on matters within its remit.

The complexity of the specialist field requires an interdisciplinary approach to problems, which implies a relationship with different institutions, both public and private.

As can be seen, the functions of the Coordinating Prosecutor are wide and varied; nonetheless, all of them are aimed at what we indicated at the beginning, achieving unity of action in the Public Prosecutor's Office through specialisation, in the interests of the principles of equality and legal security in an area such as road safety in which, in short, the aim is to advance the barrier of protection of other legal assets such as the life, health and physical integrity of people.

## 4. SPECIALISED SECTIONS IN EACH REGIONAL PROSECUTOR'S OFFICE. DEPUTY PROSECUTORS

It is envisaged that the specialised Road Safety Section will be set up in all regional public prosecutors' offices, forming part of their organisational structure as units with specific tasks. Coordinated vertical specialisation, which occurs with the creation of the Coordinating Prosecutor, involves the creation of a Road Safety Section in each prosecutor's office. This is in line with a homogeneous system that may admit certain differences depending on the templates and the volume of the subject matter in each case. The latter will determine, e.g., whether the members of these sections take on the function exclusively or not<sup>14</sup> and the number of prosecutors in these sections<sup>15</sup>.

"In general terms, specialised Sections can be defined as units within each Public Prosecutor's Office which, bringing together a series of staff and material resources, are organised in response to the need to specialise the intervention of the Public Prosecutor's Office in certain matters" (Instruction 5/2008).

At a provincial level, changes are introduced in order to strengthen the specialisation of the Public Prosecutor's Office through the specialised sections in each Provincial Prosecutor's Office. Thus, Art. 18.3(2) and (3), Organic By-Laws of the Public Prosecutor's Office states that "these Prosecutor's Offices may have specialised Sections in those matters which are determined by law or regulation, or which, due to their singularity or the volume of proceedings they generate, require a specific organisation.

<sup>14</sup> According to some reports, such as the 2014 report, they were not taken from the other services of the Prosecutor's Office in any case. At present, those who are dedicated to road safety exclusively are the exception.

<sup>15</sup> The sections will have allocations proportionate to the workload and volume of cases that they represent in each case (State Attorney General Instruction no. 11/2005).



These Sections may be set up, if deemed necessary for their proper functioning according to their size, under the direction of a Senior Prosecutor, and one or more Prosecutors belonging to the staff of the Prosecutor's Office will be assigned to them, with preference being given to those who, due to previous functions performed, courses imparted or passed or any other similar circumstance, have specialised in the field. However, when the needs of the service so require, they may also act in other areas or fields.

The Sections shall exercise the functions attributed to them by the respective Chief Prosecutors, within the scope of the matter that corresponds to them, pursuant to the provisions of these By-Laws, the implementing regulations and the Instructions of the State Attorney General. (...). The instructions given to the specialised Sections in the different Prosecutor's Offices, when they affect a specific regional area, shall be communicated to the High Prosecutor of the corresponding Autonomous Community”.

One of the areas in which there is a section in each provincial prosecutor's office is road safety<sup>16</sup>. This precept establishes the structure that, where appropriate, may be set up: a Delegate (who may be the Dean<sup>17</sup>), who will direct it, and the prosecutors assigned to it.

Furthermore, as we have indicated, preference for training sections is given to those who have specialised in the subject either because they have experience in the field (based on the functions they have performed previously) or because they have imparted or passed courses. Developing on the latter, Article 62 of the Organic Public Prosecutor Regulations (ROMF), in relation to the appointment and dismissal of Deputy Prosecutors at Special Prosecutor's Offices and Deputy Specialist Prosecutors, states that with regard to "Deputy Specialist Prosecutors: (...) In order to fill these posts, preference will be given to having received specific training in the subject matter in question and having practical experience".

However, specialisation is being strengthened not only at a provincial level, but also at the level of the autonomous regions. In this sense, Art. 18.3, paragraph 6, indicates that “these Sections may be constituted in the Public Prosecutor's Offices of the Autonomous Communities when their competences, the volume of work or the better organisation and provision of the service make this advisable”.

The Deputy of the specialist area for the Autonomous Community will be responsible for liaising and coordinating with the specialist Prosecutors of the Autonomous Community and liaison with the Coordinating Prosecutor (Instruction 1/2015).

"In the case of regional Deputy Specialist Prosecutors, the position will be filled by a provincial Delegate Specialist in the autonomous community" (Article 62 ROMF).

---

<sup>16</sup> In this regard, paragraph 5 of Art. 18.3 Organic By-Laws of the Public Prosecutor's Office establishes that “In the Provincial Prosecutor's Offices, when the volume of proceedings they generate requires a specific organisation, road safety and occupational accident sections may be set up”.

<sup>17</sup> On this issue, more extensively, see Instruction 5/2008, on the adaptation of the system for the appointment and status of the Delegates of the specialised sections of the Public Prosecutor's Offices and the internal system of communication and relations with the delegated areas of specialisation following the reform of the EOMF by Law 24/2007 of 9 October.

With regard to appointment, "the specialist delegate prosecutors, both regional and provincial, will be appointed and, where appropriate, relieved, by Decree issued by the head of the State Attorney General's Office, at the proposal of the respective Chief Prosecutor and following a report by the Specialist or Delegate Prosecutor.

The Chief Prosecutor will fill the deputy specialist vacancy from the prosecutors on staff.

The proposal for appointment of the Chief Public Prosecutor shall be reasoned and shall be accompanied by a list of all the prosecutors who have applied for the post, together with their merits. Once received by the Public Prosecutor's Inspectorate, it will be transferred to the respective Prosecutor of the Chamber, who may make such considerations as they deem appropriate, and the head of the Public Prosecutor's Office will then take a decision, after hearing the Public Prosecutor's Council" (Art. 62.2 RMF).

The Chief Prosecutor shall formalise the delegation of management and coordination functions in writing. The delegation document shall expressly state the functions related to Road Safety to be delegated, which shall be related to management or coordination activities compatible with the supervisory responsibility of the Chief Prosecutor, based on the principle of making the Section more efficient and taking into account its specialist nature.

The Chief Prosecutors may entrust the Road Safety Deputies with management and coordination functions, including but not limited to:

a) Coordination, distribution of work, and allocation of services among the specialist prosecutors assigned to the Section.

b) Relations with the Delegates of other Sections, and with the Coordinators of the other Services of the Public Prosecutor's Office and of the Permanent Attachments, as well as with the Delegates of the same specialisation at other Public Prosecutor's Offices.

c) The organisation of the Section's records.

d) The organisation and distribution of work of the auxiliary staff assigned to the Section.

e) The preparation of studies to improve the service provided by the Section or on technical issues arising from the application of regulations.

f) The production of statistical reports relating to the Section.

g) Control of the removal of indictments in proceedings relating to special matters.

h) Endorsement of reports, applications for a stay of proceedings and reports.

i) Endorsement of expert opinions involving the specialisation in question.

j) The control of judgements and the endorsement of appeals in the field of the speciality.

k) The supervision of criminal cases on matters of the speciality with defendants subject to the precautionary measure of imprisonment and the subsequent approval or knowledge of requests for release or imprisonment.

l) The drafting of the section of the Report relating to the Section.

The reports by the specialised Sections as part of the preparation of the Report will include a point referring to issues and questions which, because they have not been sufficiently resolved, are considered as being potentially subject to a ruling by the Coordinating Prosecutor of the specialisation, either by means of an Opinion or through a Circular, Instruction or Consultation.

m) Coordination with the Authorities, Services, Entities and Organisms related to activities linked to the subject of the speciality.

n) Reporting to the Coordinating Prosecutor of the facts relating to the matter of the speciality that may merit the consideration "of special importance" for the purposes of its possible direct intervention.

o) Being the spokesperson for the Public Prosecutor's Office before the media in the field of the specialisation under the direction of the Chief Public Prosecutor.

The Deputy may not in delegate the powers delegated to them by the Chief Prosecutor, unless with their authorisation and for specific tasks.

In the event that the Coordinating Prosecutor disagrees with the Chief Prosecutor of a Prosecutor's Office and the Deputy on the criteria to be adopted in ongoing proceedings, they shall present the circumstances to the State Attorney General for the appropriate decision to be taken.

Functions of the Road Safety Sections:

The Road Safety Sections, which in no case will directly assume the handling of these specialised cases, given the enormous volume of these cases.

The functions of this Section shall essentially be as follows:

1) Inform the Prosecutors of the guidelines for action on road safety generated by the General State Prosecutor's Office and by the Coordinating Prosecutor.

2) They will be directly responsible for handling the most important or complex cases relating to road safety, when the Chief Prosecutor so determines.

3) Oversee the monitoring of the unified road safety performance standards achieved.

4) When delegated by the Chief Prosecutor, they shall be responsible for drafting the annual report on road safety, to be included in the Annual Report.

5) When delegated by the Chief Prosecutor, they will be responsible for holding the appropriate periodic meetings with governmental authorities with responsibility for the

matter, the Civil Traffic Guard and Autonomous and Local Police in relation to offences related to road safety. Also, when delegated by the Chief Prosecutor, they will hold meetings and be in contact with Victims' Associations.

6) Maintain at a regional level, when delegated by the Chief Prosecutor, the necessary collaboration and participation with public and private services and entities whose function is to promote, guarantee and investigate road safety.

7) Take action to ensure the rights of victims of road violence.

8) Promote due compliance with inter-institutional communications relating to its functional area (the Instructions of the State Attorney General's Office 4/1991 of 13 June, 2/1999 of 17 May and 1/2003 of 7 April indicate that when a dismissal is requested or an acquittal is handed down in proceedings for driving under the influence of alcohol, the Court should be asked to notify the Provincial Traffic Headquarters of the relevant resolution in case the conduct deserves to be prosecuted as an administrative offence).

9) Forward indictments, reports, testimonies of proceedings, judgements and appeals on the matter considered as being of particular importance to the Prosecutor.

10) Participate in the meetings held periodically with the Coordinating Prosecutor with a view to unifying criteria.

11) Draw up a six-monthly report to be sent to the Coordinating Prosecutor, which shall include six-monthly statistics, meetings held with authorities and social agents, reference to matters of greater importance or complexity and any substantive, procedural or organisational issues or problems that may arise.

12) When delegated by the Chief Prosecutor, assume responsibility for keeping the Section's registers.

13) Inform the Road Safety Coordinating Prosecutor of any proceedings or procedures that may be considered to be of "special importance" for the purposes of its possible direct intervention.

Area Prosecutor's Offices:

The functions of the regional deputy for each speciality have a provincial nature.

To this end, coordination mechanisms must be established to allow the Deputy Prosecutor to extend their activity as Deputy to the Area Prosecutor's Offices (when the Deputy is based at the Provincial Prosecutor's Office) or to the Provincial Prosecutor's Office and the other Area Prosecutor's Offices, for cases in which, exceptionally, the Deputy is based in an Area Prosecutor's Office.

To this end, liaison prosecutors should be appointed to liaise with the Provincial Deputy of the speciality for bodies of the Public Prosecutor's Office where the Deputy is not located, i.e. normally in the Area Prosecutor's Office.

## 5. STATISTICS. 2023 STATE ATTORNEY GENERAL REPORT AND 2022 DEPARTMENT OF TRANSPORT ROAD ACCIDENT BALANCE SHEET

The 2023 Annual Report of the State Prosecutor's Office includes statistical data corresponding to 2022. Below is a summary of the figures on road safety.

The Report begins with a presentation of the provisional balance of road accidents in 2022, the first year in which mobility returned to normal after the traffic restrictions imposed during the pandemic<sup>18</sup>. The provisional data published by the Department for Traffic, referring only to interurban roads and victims registered up to 24 hours after the accident, quantified the number of fatal accidents at 1,145 people, 44 more than in 2019, up by 4%. Furthermore, 4,008 people were seriously injured, 425 less than in 2019, a decrease of 10%.

However, the figures are different in the *Balance of road accident figures 2022*, published in June 2023 by the Department for Traffic<sup>19</sup>. These figures include immediate fatalities or those occurring within 30 days of the crash and casualties on both urban and interurban roads. Only the data for Catalonia are provisional. In 2022, 1,746 people died on our roads, compared to 1,755 in 2019, a decrease of 0.51%. On the other hand, 8,503 people were seriously injured, compared to 8,613 in 2019<sup>20</sup>, a decrease of 1.2%.

This implies a death rate per million residents of 37 - 32 in 2021 and 37 in 2019. This places Spain in sixth among EU countries, with an average of 46<sup>21</sup>.

The following table shows the number of deaths per million inhabitants. 1993-2021.

Years	Death rate
1993	162
1994	142
1995	145
1996	138
1997	140
1998	148
1999	142
2000	143
2001	136
2002	130
2003	129
2004	111
2005	103
2006	93
2007	85
2008	68
2009	59
2010	53
2011	44
2012	41

<sup>18</sup> The restrictions remained in place until 9 May 2021, when the last state of emergency was lifted.

<sup>19</sup> *Vid.*, *Balance de las cifras de siniestralidad vial 2022*, <https://www.dgt.es/export/sites/web-DGT/.galleries/downloads/dgt-en-cifras/24h/Avance-de-las-cifras-de-siniestralidad-vial-2022.pdf>.

<sup>20</sup> *Balance de las cifras de siniestralidad vial 2022*, cit., p. 4.

<sup>21</sup> *Balance de las cifras de siniestralidad vial 2022*, cit., p. 6 y 7.

2013	36
2014	36
2015	36
2016	39
2017	39
2018	39
2019	37
2020	29
2021	32
2022	37

The following table shows the number of deaths per million inhabitants. European Union, 2022.

<b>Country</b>	<b>Death rate</b>
Sweden	22
Denmark	26
Ireland	31
Germany	33
Finland	34
Spain	37
Estonia	38
Slovenia	40
Austria	41
Cyprus	41
The Netherlands	42
Lithuania	43
Belgium	45
Slovakia	45
France	48
Malta	50
Czech Republic	50
Poland	50
Italy	54
Hungary	55
Luxembourg	56
Latvia	60
Greece	61
Portugal	62
Croatia	71
Bulgaria	78
Romania	86
EU-27	46

The number of people killed on interurban roads increased compared to 2019 (1,270 compared to 1,236) in contrast to the decrease on urban roads: 476 deaths compared to 519 in 2019<sup>22</sup>.

<sup>22</sup> *Balance de las cifras de siniestralidad vial 2022*, cit., p. 9.

The following table shows the number of casualties on interurban roads. 2013-2022.

<b>Year</b>	<b>Total</b>	<b>Deceased persons</b>	<b>Injured persons requiring hospital treatment</b>	<b>Injured persons not requiring hospital treatment</b>
2013	57,732	1,230	5,182	51,320
2014	54,774	1,247	4,834	48,693
2015	54,028	1,248	4,744	48,036
2016	57,720	1,291	5,050	51,379
2017	58,427	1,321	4,766	52,340
2018	58,892	1,317	4,451	53,124
2019	56,946	1,236	4,303	51,407
2020	38,582	975	3,361	34,246
2021	47,399	1,116	3,642	42,641
2022	49,623	1,270	3,897	44,456

The following table shows the number of casualties on urban roads. 2013-2022.

<b>Year</b>	<b>Total</b>	<b>Deceased persons</b>	<b>Injured persons requiring hospital treatment</b>	<b>Injured persons not requiring hospital treatment</b>
2013	68,668	450	4,904	63,314
2014	73,546	441	4,740	68,365
2015	82,116	441	4,751	76,924
2016	84,480	519	4,705	79,256
2017	82,565	509	4,780	77,276
2018	81,523	489	4,484	76,550
2019	84,167	519	4,310	79,338
2020	57,350	395	3,320	53,635
2021	72,296	417	4,142	67,737
2022	79,980	476	4,606	74,898

In 2023, the provisional figures for fatalities within 24 hours on interurban roads in summer are as follows<sup>23</sup>.

Between 1 July and 31 August 2023, a total of 234 people were killed and 946 people injured were hospitalised.

These numbers show a 3% increase in the number of people killed compared to the same period in 2022. Compared to 2019, there is a 9% increase in the number of deaths. In terms of injured persons requiring hospital treatment, there is an increase of 13% compared to 2022 and 6% compared to 2019.

The slight decrease in the accident rate for 2022 is in contrast to the data provided by the court statistics on road crime - road safety offences. These figures have increased again for all indicators in 2022, the highest in recent years, with percentage increases of

<sup>23</sup> Vid. *Fatalities on interurban roads. Summer 2023. Deaths within 24 hours. Provisional data*, [https://www.dgt.es/export/sites/web-DGT/.galleries/downloads/dgt-en-cifras/24h/Informe\\_Verano\\_2023\\_1Sep.pdf](https://www.dgt.es/export/sites/web-DGT/.galleries/downloads/dgt-en-cifras/24h/Informe_Verano_2023_1Sep.pdf).



between 20% and 30% (depending on the indicator) compared to 2019. There are therefore road crime figures that are not connected to mobility and road accident data.

Road safety offences (Arts. 379 to 385 Criminal Code) in 2022 saw a new and significant increase in court proceedings, indictments and convictions, which were again well above not only the pre-pandemic figures of 2019 and previous years, but also those of 2021 in which the figures for road crime were notably high. In 2022, the volume of indictments and convictions were the highest on record since the reform carried out under Organic Law 15/2007, and the same goes, as we will analyse below, for the number of proceedings initiated.

These court figures from 2022, the first year with in which mobility returned to normal after Covid-19, seem to indicate a change in our driving habits after the pandemic. This has resulted in a notable increase in traffic crime in our country, as a consequence of a consequent loss of the necessary road awareness that citizens had acquired in recent years.

In 2022, 137,406 proceedings were initiated in Spain for road safety offences under Art. 379 to 385 of the Criminal Code, an overall increase of 11,400 proceedings and a percentage increase of 9.1% compared to 2021 (which already saw an increase of 9.8% compared to 2019). The volume of court activity in the field of road offences is the highest from the past decade and dating back to 2005, only surpassed by the 140,650 proceedings filed in 2011.

The proceedings initiated, as Preliminary or Urgent Proceedings, for offences in relation road safety and their evolution, since 2012, is reflected below:

Preliminary Proceedings + Urgent Proceedings	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<i>Art.379.1 Criminal Code</i>	1,021	752	818	902	813	842	889	1,562	1,193	1,111
<i>Art.379.2 Criminal Code</i>	72,430	69,340	61,346	61,177	59,466	69,121	68,039	57,262	70,674	77,133
<i>Art. 380 Criminal Code</i>	2,587	2,384	2,310	2,658	2,761	1,553	2,009	3,050	3,360	3,539
<i>Art. 381 Criminal Code</i>	318	204	190	204	190	87	207	297	268	267
<i>Art. 383 Criminal Code</i>	2,070	1,884	1,550	1,583	1,819	2,013	2,381	2,252	2,897	3,261
<i>Art. 384 Criminal Code</i>	36,017	33,883	31,231	31,262	30,875	36,649	40,670	37,172	47,058	51,431
<i>Art. 385 Criminal Code</i>	411	396	482	417	379	389	477	489	489	664
<b>OVERALL</b>	114,854	108,843	97,927	98,203	96,303	110,654	114,672	102,084	125,939	137,406

In 2022, 105,078 indictments were brought by the Public Prosecutor's Office for dangerous road offences, just over 34% of the total number of indictments brought by the Public Prosecutor's Office for all types of prosecutions for all offences (the highest comparative percentage in the last six years).

In the same year, 104,660 convictions were handed down for road safety offences under Arts. 379-385 of the Criminal Code, more than 36% of all those pronounced by the Courts for all kinds of offences (also the highest comparative percentage of the last six years). Of these, 59,461 convictions were for driving under the influence of alcohol and

drugs (4,697 convictions more than in 2021, up by 8.5%), the highest number of convictions for this offence since 2012, and 38,383 for driving without a licence (4,256 more than in 2021, up by 12.4%), the highest figure for this offence in the last decade.

Indictments and convictions over the past three years are reflected in this table:

Comparison 2020-2022	Public prosecution accusations in 2020	Sentences in 2020	Public prosecution accusations in 2021	Sentences in 2021	Public prosecution accusations in 2022	Sentences in 2022
<b>379.1 Criminal Code</b>	707	391	733	578	<b>644</b>	<b>569</b>
<b>379.2 Criminal Code</b>	39,485	38,241	53,298	54,764	<b>58,041</b>	<b>59,461</b>
<b>380 Criminal Code</b>	1,918	1,433	2,246	1,928	<b>2,222</b>	<b>2,12</b>
<b>381 Criminal Code</b>	169	82	154	138	<b>182</b>	<b>114</b>
<b>383 Criminal Code</b>	2,482	2,301	3,401	3,382	<b>5,16</b>	<b>3,967</b>
<b>384 Criminal Code</b>	26,807	24,156	36,367	34,127	<b>38,787</b>	<b>38,383</b>
<b>385 Criminal Code</b>	45	44	45	25	<b>42</b>	<b>46</b>
<b>OVERALL</b>	<b>71,613</b>	<b>66,648</b>	<b>96,244</b>	<b>94,942</b>	<b>105,078</b>	<b>104,66</b>

With this in mind, more than one third of criminal charges and convictions in Spain were for dangerous road offences.

Both the number of indictments and the number of convictions in 2022 have seen extraordinary increases, both in relation to the previous year (when the figures were already remarkably high) and the pre-pandemic period. Thus, approximately 8,800 more indictments have been brought in 2022 than in 2021 (a percentage increase of 9.1%) and approximately 9,700 more convictions have been handed down than in 2021 (a percentage increase of 10.2%). It is worth noting that the volume of indictments and convictions in 2022 is the highest on record, with the number of indictments exceeding 103,853 in 2009 and convictions exceeding 100,000, which has not been the case at least since the major reform of 2007.

An estimated 90% of the total of 104,660 convictions were handed down without dispute, allowing for the almost immediate execution of the 66,231 disqualifications from driving and 1,612 loss of driving licence under Art. 47.3 of the Criminal Code this year, and the prompt execution of a large part of the estimated 76,000 fines and 25,485 community service sentences also imposed in 2022.

Finally, below, details are provided of the investigation proceedings of the Public Prosecutor's Office for dangerous road offences within the framework of Art. 5 of the EOMF. Thus, in 2022, 670 proceedings were initiated for road safety offences under Arts. 379-385, the vast majority (specifically 621) for driving without a licence under Art. 384 of the Criminal Code, continuing the downward trend noted in previous years which,

according to a number of Deputy Prosecutors, may be due to better coordination between Provincial Headquarters, Traffic Police, Public Prosecutor's Office and Courts.

In terms of positive resolution rates, the already high percentage of proceedings ending in conviction continued to rise in 2022, with approximately three out of every four proceedings initiated seeing a sentence handed down (76%, with a percentage increase of 1% compared to 2021). When adding the number of convictions to the number of acquittals and dismissals, the resolution rates would be practically the same between proceedings initiated and those resolved, consolidating the speed, efficiency, interpretative uniformity and legal certainty of criminal traffic justice in Spain.

The table below shows the so-called positive resolution rates, i.e. the ratio between the number of cases resolved by conviction and the number of proceedings initiated, as well as year-on-year changes:

CRIMES CSV	Preliminary Proceedings+Urgent Proceedings 2022	Sentences in 2022	Resolution rate 2022	Resolution rate 2021
379.1 Criminal Code	1,111	569	0.51 (51%)	0.48
379.2 Criminal Code	77,133	59,461	0.77 (77%)	0.77
380 Criminal Code	3,539	2,12	0.59 (59%)	0.57
381 Criminal Code	267	114	0.42 (42%)	0.51
383 Criminal Code	3,261	3,967	1.21 (121%)	1.16
384 Criminal Code	51,431	38,383	0.74 (74%)	0.72
385 Criminal Code	664	46	0.06 (6%)	0.05
<b>OVERALL</b>	<b>137,406</b>	<b>104,66</b>	<b>0.76 (76%)</b>	<b>0.75</b>

In 2022, more than 73% (almost three out of four, up by 2.4% compared to 2021) of the proceedings initiated and 82% (approximately four out of five, a percentage increase of 2.7% compared to 2021) of the charges brought for dangerous road traffic offences were brought through the fast-track trial procedure. This consolidates the overcoming of anomalies seen during the pandemic and reinforces the traditional speed of the criminal response to road traffic crime in Spain.

This is reflected in the following table:

ROAD CRIMES	Preliminary Proceedings	Urgent Proceedings	Total
Proceedings Initiated	37,059	100,347	137,406
Indictments Brought	18,113	86,965	105,078

In 2022, the volume of convictions rose across the board in all territories, with the exception of Catalonia, with around 900 fewer convictions, Aragon and La Rioja. The largest increases in absolute terms occurred, in this order, in Madrid, with almost 5,000 more convictions than in 2021, Valencia, Andalusia and the Canary Islands, the latter three Autonomous Communities with approximately 1,000 more sentences than in the previous year. However, despite these slight fluctuations, the regional distribution of convictions by Autonomous Community remains practically identical, with Catalonia, despite the aforementioned reduction, maintaining its traditional first place, followed by Andalusia and Madrid, which climbs one place, above the Region of Valencia, which drops to fourth.

The following table shows the regional distribution of convictions and their evolution 2020-2021:

Autonomous communities	379.1 Criminal Code	379.2 Criminal Code	380 Criminal Code	381 Criminal Code	383 Criminal Code	384 Criminal Code	385 Criminal Code	TOTAL 2022 (in brackets 2021)	CHANGE 2021-2022
Andalusia	67	9,324	517	33	492	7,964	3	18,400 (17,313).	+1,087
Aragon	13	841	23	0	28	606	3	1,514 (1,652).	-138
Asturias	3	1,311	48	0	69	595	1	2,027 (1,831).	+196
Balearic Islands	12	2,229	52	0	148	1,183	2	3,626 (3,218).	+408
Canary Islands	25	2,767	59	9	318	2,285	0	5,463 (4,457).	+1,006
Cantabria	5	758	44	3	33	489	1	1,333 (1,109).	+224
Catalonia	135	9,899	315	23	814	7,316	4	18,506 (19,407).	-901
Extremadura	8	1,012	59	2	43	506	2	1,632 (1,603).	+29
Galicia	36	3,645	110	2	227	2,425	1	6,446 (5,804).	+642
La Rioja	3	330	25	0	27	219	2	606 (635).	-29
Madrid	94	9,732	229	10	576	4,967	2	15,610 (10,631).	+4,979
Murcia	7	2,284	82	5	143	1,486	0	4,007 (3,896).	+111
Navarre	9	915	30	0	42	381	1	1,378 (1,210).	+168
Basque Country	11	2,297	86	11	195	951	5	3,556 (3,443).	+113
Region of Valencia	88	7,570	266	8	564	3,875	2	12,373 (11,059).	+1,314
Castilla-La Mancha	15	2,120	62	5	107	1,514	15	3,838 (3,723).	+115
Castilla-Leon	38	2,427	113	3	141	1,621	2	4,345 (3,951).	+394
Total sentence	569	59,461	2,120	114	3,967	38,383	46	104,660	

The graphical representation of the statistical data (indictments and convictions) is as follows:

Table 1. Indictments for criminal offences

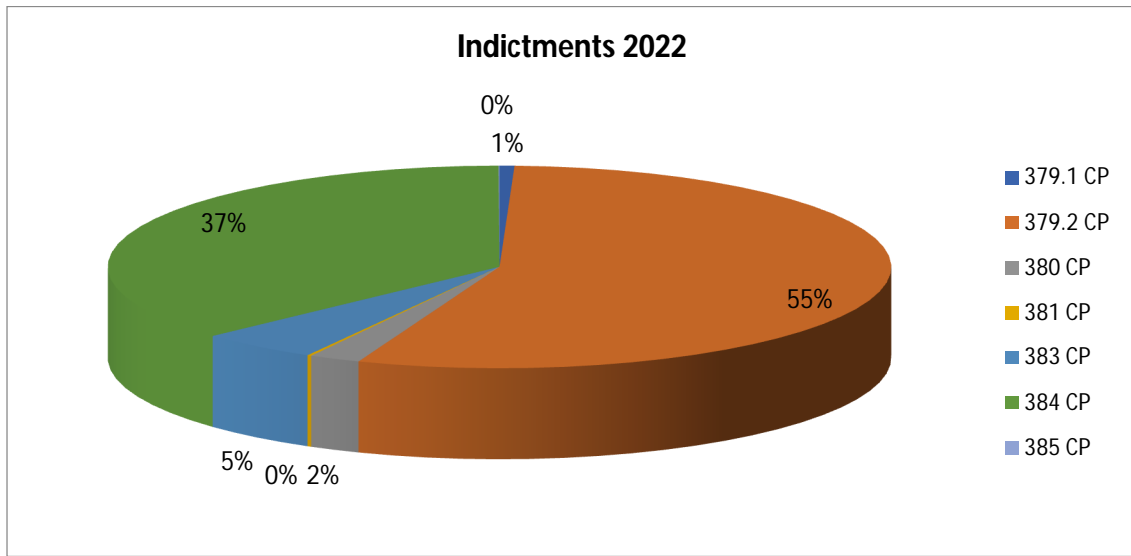
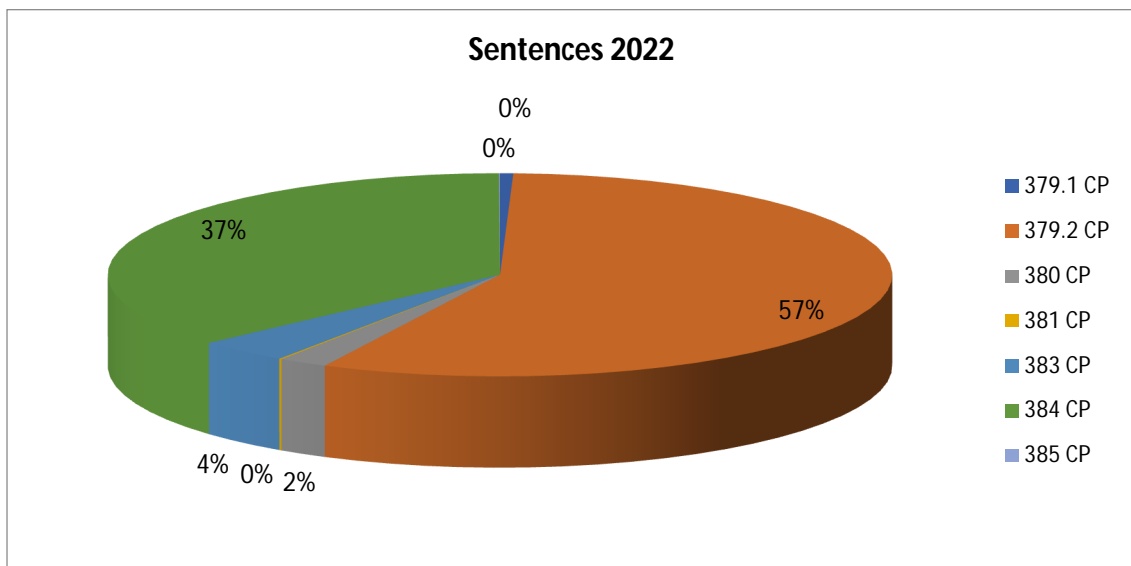


Table 2. Convictions for offences



These statistics for 2022, analysed above, allow us to draw the conclusion that from a quantitative perspective, the weight of this speciality deserves to be addressed through specialisation. On the other hand, from a qualitative perspective, the legal assets that are ultimately at stake, either directly (crimes of result) or indirectly (crimes of endangerment), are of the highest level.

## 6. 2030 ROAD SAFETY STRATEGY

The Road Safety Strategy<sup>24</sup> sets out a general roadmap that guides institutional actions on road safety in the coming years. This document connects to the previous 2011-2020 Strategy and serves as a national reference framework for road safety policy in our country in the 2030 horizon.

The 2030 Road Safety Strategy is the result of a reflection process involving three areas:

Firstly, internally, at the Department of Traffic, entailing an assessment of the previous strategy and of the current road safety situation and future forecasts.

As well as the analysis of the most relevant international strategies and resolutions, with a view to remaining aligned with the most current and efficient trends and proposals.

And finally, a process of shared reflection with the main road safety stakeholders in our country, both from the different public administrations and from civil society. This process has been led by the Superior Council for Traffic, Road Safety and Sustainable Mobility<sup>25</sup>.

The two main objectives of the 2011-2020 Strategy were to lower the death rate to 37 deaths per million inhabitants and to reduce the number of people seriously injured by 35%. The targets achieved represent a 37.3% drop in the annual death rate per million inhabitants and a 38.1% reduction in the number of seriously injured people<sup>26</sup>.

The document, in analysing the current road accident situation in our country, highlights that the most frequent causes of accidents were distractions (28%), driving under the influence of alcohol<sup>27</sup> or drugs<sup>28</sup> (25%) and speeding (23%)<sup>29</sup>. Furthermore, vulnerable groups and means of transport (pedestrians, bicycles, motorbikes) accounted for 53% of the total number of fatalities, the first time they have exceeded 50% on record. One in four fatalities was a motorbike rider; and 82% of all those killed on urban roads were vulnerable<sup>30</sup>.

National road safety policies need to be understood within an international context<sup>31</sup> to support and align their objectives.

---

<sup>24</sup> See the 2030 Road Safety Strategy at <https://seguridadvial2030.dgt.es/inicio/>.

<sup>25</sup> See 2030 Road Safety Strategy, p. 10.

<sup>26</sup> See 2030 Road Safety Strategy, cit., p. 15 and 16.

<sup>27</sup> On the role played by alcohol in road accidents, see, extensively, MONTORO GONZÁLEZ, L., ALONSO PLA, F., ESTEBAN MARTÍNEZ, C., TOLEDO CASTILLO, F., *Manual de Seguridad Vial: el factor humano*, Ariel, 1st edition, 2000, p. 249 to 285.

<sup>28</sup> On the role played by drugs in road accidents, see, extensively, MONTORO GONZÁLEZ, L., ALONSO PLA, F., ESTEBAN MARTÍNEZ, C., TOLEDO CASTILLO, F., *Manual de Seguridad Vial: el factor humano*, cit. p. 287 to 314.

<sup>29</sup> See 2030 Road Safety Strategy, p. 11, 12, 159.

<sup>30</sup> See 2030 Road Safety Strategy, p. 12.

<sup>31</sup> On international policies, see the document 2030 Road Safety Strategy, cit. p. 64 et seq.

In 2015, the UN included road safety in the 2030 Agenda as one of the main health and development issues to be addressed through the achievement of the Sustainable Development Goals.

A key milestone in addressing road safety for the next decade was the 3rd Global Ministerial Conference on Road Safety, organised by the WHO in Stockholm in February 2020.

The UN's commitment to road safety has been updated in the resolution on Improving Global Road Safety, which proclaims the 2021-2030 period as the Second Decade of Action for Road Safety, with a view to reducing road traffic deaths and injuries by at least 50% during this period. As a result of this declaration, the WHO published the 2021-2030 Global Plan for the Decade of Action for Road Safety.

The European Union also recognises the need to continue the road safety improvement efforts made from 2011 to 2020. This was reflected in the 2017 Valletta Declaration, in which EU member states committed to following up with the ultimate goal of achieving *Vision Zero* by 2050, but with achievable targets over the next decade (2021-2030). In particular, the reduction by half of the number of people killed and seriously injured as a result of road accidents is presented as the main objective for 2030.

The European Commission's work to define the framework for road safety in Europe for the next decade was set out in the document: *EU Road Safety Policy Framework 2021-2030. Next Steps towards 'Vision Zero'*.

The Road Safety Strategy endorses the two main objectives proposed by the UN and the European Commission:

By 2030, reduce the number of people killed by 50% compared to the 2019 baseline (1,755).

By 2030, reduce the number of seriously injured people by 50% from the 2019 baseline (8,613)<sup>32</sup>.

These general objectives are further developed into specific objectives in chapter 7. With a view to implementing the policies outlined in this chapter, nine major strategic areas are set out, which are developed along various lines of action.

Within the strategic area "Zero tolerance for high-risk behaviour", one of the lines of action is "Updating the criminal framework and strengthening the fight against traffic offences". The first objective in this line is to update and implement the criminal law framework, in order to improve the fight against trafficking offences and to improve the protection of victims under criminal law.

Also in this area, procedures for the detection of pre-crash mobile phone use and the investigation of driving under the influence of illegal drugs will be improved.

---

<sup>32</sup> See *2030 Road Safety Strategy*, p. 122.



Dissemination of information on the location of police checkpoints will continue to be tackled.

During the life of the Strategy, an analysis will be performed on the impact on the criminal investigation of the availability of data collected by the various vehicle safety systems, in particular the new data recording systems (EDR): *Event Data Recorder*, colloquially known as "black box") which will be mandatory for all vehicles from 2024 (categories M1 and N1) and 2029 (all other categories).

The Department of Traffic will continue, in collaboration with law enforcement officers, the plan to monitor driving without a licence that has already been deployed through the Provincial Traffic Headquarters<sup>33</sup>.

Within the strategic area "Effective and fair response to accidents", one of the lines of action is "Reducing response times and improving assistance in the event of an accident".

The main objective in this respect should be the reduction of response times ("golden hour" or, now, "golden minutes"). These times can be divided into two parts. Firstly, the time taken to notify the emergency services. Secondly, the arrival times of the emergency services, *on-site* victim care and transfer to the hospital.

Another line of action in this strategic area is "Guaranteeing the rights of traffic victims".

Long-term care must go beyond health care, as the after-effects of an accident on the victims and their immediate environment have an impact on many other factors, including but not limited to personal, family, social and work-related.

In this area, a variety of actions are proposed in this strategy, including but not limited to:

- Strengthening inter-agency cooperation to improve care for victims.
- Fully integrating traffic victims in crime victims' assistance offices and strengthening the assistance provided to them.
- Updating the System for the Assessment of Damages caused to persons in traffic accidents, pursuant to the recommendations of the Monitoring Commission created under Law 35/2015.
- Strengthening the monitoring of the evolution of road traffic victims to analyse the impact of non-immediate damages and affect effects.
- Promoting and enhancing the visibility of psychological and legal care activities of non-profit organisations representing traffic victims<sup>34</sup>.

---

<sup>33</sup> See 2030 Road Safety Strategy, cit., p. 173 and 174.

<sup>34</sup> See 2030 Road Safety Strategy, cit., p. 232-234.



It should be noted that the Road Safety Strategy, as we have already mentioned, is a road map that serves as a guide for the actions of the different institutions involved in road safety. Therefore, it cannot be indifferent to the Public Prosecutor's Office. In addition, many of the actions proposed to achieve the proposed objectives are related to the functions of the Public Prosecutor's Office in the field of road safety. As highlighted, this connection can be seen both from the perspective of the criminal prosecution of these conducts (updating the criminal framework and strengthening the fight against traffic offences) and from the perspective of protection, in a wider sense, of the victims (reducing response times and improving assistance in the event of an accident and guaranteeing the rights of traffic victims).

## 7. GENERAL MATTERS IN RELATION TO THE PRESENT AND FUTURE OF ROAD SAFETY

Mobility and road safety are affected by people's lifestyle habits<sup>35</sup>.

The expected evolution of road safety in the coming years will depend not only on endogenous factors associated with road safety policies, but also on exogenous trends in the field of mobility and society in general. In this regard, in line with the *2030 Road Safety Strategy*, worth particular note are<sup>36</sup>:

- Climate change. The 27 Member States of the European Union are committed to making the EU the world's first climate neutral zone by 2050. To achieve this, emissions are to be reduced by at least 55% below 1990 levels by 2030. The transport sector is the second largest polluter after the energy sector, producing more than 20% of GHG emissions across Europe. These environmental policies will bring about significant changes in mobility in the coming years, both in the modal distribution of transport and its volume and in people's mobility patterns, which will greatly affect mobility in urban environments.

- Population ageing. In 2030, 24% of our country's population will be aged 65 and over.

- Population growth in cities and population decline in rural areas. There are two challenges. On the one hand, safe travel in urban and peripheral urban areas with increasing mobility needs. In addition, the emergence of new forms of mobility that aim to respond to these needs, and the ageing of the population, already mentioned, are also contributing to this area. Furthermore, the safety of journeys in increasingly depopulated rural areas, which are mostly made on conventional roads. Moreover, in these areas the impact of population ageing is even greater.

---

<sup>35</sup> LIJARCIO, I., CATALÁ, C., USECHE, S., ROMANÍ, J. Y LLAMAZARES, J., *Gestión de la Movilidad y la Seguridad Vial en Euskadi después del Covid-19*, report by FESVIAL (Fundación para la Seguridad Vial) for the Department of Traffic, Department of Safety of the Basque Government, 2021, at <https://fesvial.es/wp-content/uploads/2022/04/Informe-Gesmovid-21-FINAL.pdf>, p. 76.

<sup>36</sup> See *2030 Road Safety Strategy*, p. 53-61.

- New forms of mobility: personal mobility vehicles<sup>37</sup>, electric bicycles, conventional electric traction vehicles, shared vehicles, vehicles dedicated to urban goods distribution, etc.

- Technological progress. Both in infrastructures and traffic monitoring and management systems (connectivity and use of *big data*), as well as in vehicles (ADAS, connectivity, ITS, automatic driving, electric propulsion), the aim is to reduce the accident rate attributable to errors and risky behaviour, although it poses the challenge of properly integrating technology to prevent the emergence of new risks.

- The culture of young people. They are committed to usage, sharing, sustainability, multimodal mobility and smartphones. In other words, some of the trends outlined above are particularly important to this group, which is why it is expected that these trends will increase in importance in the future.

- Road safety at organisations (companies and administrations). Both social organisations (such as companies, associations, universities) and public administrations have an enormous influence on society through a wide variety of factors that can be used to improve road safety. Directly, by promoting road safety for their employees, customers and suppliers. Indirectly, by adopting road safety criteria in their value chain, in their purchasing decisions for goods and services needed to perform their functions and ensure the safety of their products. Furthermore, the percentage weight of road traffic accidents (RTAs) in minor accidents at work is 11.8%, which increases progressively as accidents become more serious: RTAs account for 21.8% of serious accidents at work and, in the case of fatal accidents at work, this percentage rises to 32.4%. In other words, occupational road traffic accidents have become one of the leading causes of death in terms of occupational accidents<sup>38</sup>.

As we are talking about the future, I think it is vitally important that we mention training.

Road safety education is one of the fundamental pillars of road safety. Since the 2022-2023 school year, minimum road safety content has been taught at primary schools and secondary schools, following the approval of Royal Decree 157/2022 of 1 March, establishing the organisation and minimum teaching of Primary Education, and Royal Decree 217/2022 of 29 March, establishing the organisation and minimum teaching of Compulsory Secondary Education.

In light of the above, there is no doubt that road safety (and mobility in general) needs to be considered as an issue to be addressed from a multidisciplinary perspective.

---

<sup>37</sup> GARCÍA-VALLE PÉREZ, M., *La responsabilidad por daños en accidentes con patinetes eléctricos*, cit., points out that the use of electric scooters is an economical, ecological and fast solution for mobility, but the worst consequence of their rise in popularity has been the proliferation of accidents in which they have been involved.

<sup>38</sup> See 2030 Road Safety Strategy, cit., p. 246 and 247.

## 8. THE IMPORTANCE OF ROAD SAFETY

In doctrine<sup>39</sup>, road safety is considered as the series of conditions established by the legal system for the protection of life, health, physical integrity and other individual legal assets, in which driving a motor vehicle represents a legally permissible risk<sup>40</sup>.

Road safety is a greater legal right, but linked to individual legal rights, playing a role in guaranteeing them<sup>41</sup>.

As far as case law is concerned, Constitutional Court Ruling No. 161/1997 of 2 October 1997 states that “driving motor vehicles is an activity that can seriously endanger the life and physical integrity of many people, to the extent that it is now the leading cause of death in an age group of the Spanish population; hence, as with many other potentially dangerous activities, it is fully justifiable that the public authorities, who must first and foremost watch over the lives of citizens, make the exercise of this activity subject to compliance with strict requirements, subject those who wish to carry it out to preventive controls performed by the public authorities and impose sanctions for non-compliance consistent with the seriousness of the goods to be protected”.

In turn, Supreme Court Ruling No. 420/2023, of 31 May, also indicates that “driving a motor vehicle always generates a danger to the life and physical integrity of persons, and must therefore be carried out with great diligence”. And also Supreme Court Ruling No. 105/2022, of 9 February, points out that “road safety, considered as an intermediate legal right that punishes the risks to the life and integrity of persons caused by driving motor vehicles, thus anticipating the protection of these personal assets”.

When referring to the crimes of homicide or reckless injury in the field of road safety, we are no longer talking about the legal right of road safety but directly about legal rights of the highest level, such as life or the health and physical integrity of persons.

When considering the statistical data and taking into account the importance of the legal rights at stake, it is clear that road safety is a major concern<sup>42</sup> and relevant for an institution such as the Public Prosecutor's Office.

---

<sup>39</sup> The different doctrinal positions on the protected legal right in offences against road safety can be consulted, extensively, in MORELL ALDANA, L. C., *Delitos contra la seguridad vial y siniestralidad de los nuevos tipos de vehículo*, Wolters Kluwer, 2019, p. 55 to 60.

<sup>40</sup> CARDENAL MONTRAVETA, S., “Delitos contra la seguridad vial (arts. 379-385b)”, in AAVV (dir. CORCOY BIDASOLO, M.), *Manual de Derecho Penal, Parte Especial, Adaptado a las LLOO 1/2019 y 2/2019 de Reforma del Código Penal, Doctrina y jurisprudencia con casos solucionados*, Tirant lo Blanch, Valencia, 2019, p. 588.

<sup>41</sup> ESCUCHURRI AISA, E., “Delitos contra la seguridad vial”, in AAVV (dir. Romeo Casabona, Sola Reche, Boldova Pasamar) *Derecho Penal, Parte Especial, Conforme a las Leyes Orgánicas 1 y 2/2015, de 30 de marzo*, Granada, 2016, p. 632.

<sup>42</sup> However, DE VICENTE MARTÍNEZ, R., *Siniestralidad vial, delitos imprudentes y fuga*, Reus, Madrid, 2019, p. 10, shows that despite the data and the horrifying figures they reflect, in the official opinion barometers organised by the Spanish Centre for Sociological Research (CIS), road accidents do not appear among the main concerns of citizens; see Barómetro de marzo 2023, at [https://www.cis.es/cis/export/sites/default/-Archivos/Marginales/3380\\_3399/3398/es3398mar.pdf](https://www.cis.es/cis/export/sites/default/-Archivos/Marginales/3380_3399/3398/es3398mar.pdf).

In the face of the figures, society must not consign itself to a resigned sense of fatalism, as if the dramas behind the figures were a necessary part of road mobility<sup>43</sup>. In some areas, such as road traffic, a certain level of risk is accepted given its social utility but only up to a certain level that is considered socially bearable. Therefore, the legal system sets limits to this permitted risk, establishing standards of care which, if exceeded, make the allocation of the result viable, should it occur. Alongside the undoubted benefits it provides, there are certain negative effects (pollution, accidents, etc.) that need to be addressed, of which the latter is worth particular mention. On the other hand, despite the different elements involved in a road accident (vehicle, infrastructure, etc.) the human factor occupies a fundamental place<sup>44</sup>.

Although not all deaths are the result of criminally reprehensible behaviour, the figures indicate that the human and social problem is of the utmost importance. Behaviours that entail disregard for the life or physical integrity of others or unforgivable carelessness constitute a significant portion of the determining causes of these tragic figures<sup>45</sup>.

Criminal law has sufficient and suitable means to contribute to the solution of the problem, although it cannot be the only solution, it must operate as the safety net for the system and, for it to be useful, there must first be effective administrative regulations with a correct functioning of its educational, preventive and sanctioning aspects<sup>46</sup>.

## 9. VICTIMS

Article 3.10 of the Organic By-Laws of the Public Prosecutor's Office and Article 773.1 of the Criminal Prosecution Law establish that the prosecutor must ensure the protection of the victim's rights. This is a concrete expression of its constitutional mission to promote the action of justice in defence of citizens' rights, as well as in defence of legality and the public interest protected by law.

Furthermore, we must take into account Law 4/2015, of 27 April, on the Statute of the Victims of Crime, transposing Council Framework Decision 2001/220/JHA and Directive 2012/29/EU, which replaces it.

Its Art. 19 refers to "the authorities and officials responsible for the investigation, prosecution and trial of offences" as subjects of this duty towards victims, pointing especially to the Public Prosecutor's Office in the case of minors.

As the Preamble of the Law states, the purpose of the Statute of Victims "is to offer the public authorities the broadest possible response, not only legal but also social, to victims, not only to repair the damage in the framework of criminal proceedings, but also

---

<sup>43</sup> MENA ÁLVAREZ, J. M., "El delito de conducción temeraria", in *Derecho Penal y Seguridad Vial*, Estudios de Derecho Judicial, 114, CGPJ, 2007, p. 231.

<sup>44</sup> MONTORO GONZÁLEZ, L., ALONSO PLA, F., ESTEBAN MARTÍNEZ, C., TOLEDO CASTILLO, F., *Manual de Seguridad Vial: el factor humano*, cit. p. 20 and 22.

<sup>45</sup> MENA ÁLVAREZ, J. M., "El delito de conducción temeraria", cit. p. 231 and 232.

<sup>46</sup> GONZÁLEZ CUSSAC, J. L., "(Comunicación) La reforma penal de los delitos contra la seguridad vial (Proyecto 2006)", in *Derecho Penal y Seguridad Vial*, Estudios de Derecho Judicial, 114, CGPJ, 2007, p. 279.

to minimise other traumatic effects in moral terms that their condition may generate, regardless of their procedural situation”.

Art. 3 of the Statute of Victims indicates that “every victim has the right to protection, information, support, assistance and care, as well as to active participation in criminal proceedings and to respectful, professional, individualised and non-discriminatory treatment from the first contact with the authorities or officials, during the provision of victim assistance and support and restorative justice services, throughout the criminal proceedings and for an appropriate period of time after their conclusion, whether or not the identity of the offender is known and irrespective of the outcome of the proceedings”.

The Statute of Victims establishes measures that can be taken during the investigation (manner of receiving testimony) and trial phase (avoiding eye contact, testifying using communication technologies, avoiding questions about private life, trial without an audience).

The State Attorney General is committed to a proactive conception of the Public Prosecutor’s Office with regard to the protection of victims of crime. Proof of this is Instruction 8/2005, on “the duty of information in the protection of victims in criminal proceedings”, the existence of a Deputy Prosecutor at the State Attorney General and Deputy Prosecutors in each prosecutor's office.

Circular 10/2011, states that Prosecutors shall ensure “...their rights to information and participation in the proceedings (Arts. 779.1.1, 785.3, 789.4, 792.4, 962 and 962 and 976 Criminal Prosecution Law) and for the complete coverage of their needs in the economic and personal aspect”.

As State Attorney General Instruction 8/2005 points out, “criminal proceedings cannot be considered exclusively from the perspective of the necessary protection of the interests of society and the guarantees of the person accused, but also and importantly, as an instrument of reparation of the moral and financial damage that the victim has received as a result of the criminal act. Reparation that cannot be a source of further harm to the victim, thus avoiding secondary victimisation”.

Instruction 8/2005 also states that “the victim of any crime, and in particular the most vulnerable victims, have the right to be clearly informed, in accessible language, of their rights, of what they can or cannot expect, where to go for social, economic or psychological assistance, to know, in short, what the response provided for by the law is, and entrusted especially to the Public Prosecutor's Office, in defence of their interests”. The aforementioned Instruction points out that, in certain crimes, including crimes against life and physical or mental integrity, the action of the Public Prosecutor's Office must have a greater impact. Foreign citizens in transit or visiting Spain as tourists will also require special attention, as they are in a situation of greater vulnerability. This duty to inform the victim must be enforced both in the pre-procedural and in the procedural phase. In the first case, information will deal with how to access the victims’ assistance office, legal guidance service, public economic and assistance aid, etc. In the second, which will be especially important if the victim does not appear in the case, it should cover the offer of actions (Articles 109, 109 bis, 110, 962 and 967 Criminal Prosecution Law), the time of the victim's statement (avoiding repeated summons, coinciding with the accused party, protecting the image and privacy of minors, or urging pre-constituted or

anticipated evidence if they are foreigners in transit or tourism), as well as the notification of court rulings (Articles 779.1.1, 785.3, 789.4, 791.2, 792.5, 973.2 and 976.3 Criminal Prosecution Law). Without prejudice to contacting the victim in the cases referred to in the aforementioned Instruction before requesting the provisional dismissal of the case for lack of evidence or the filing of the indictment, after agreement at trial or in the event of a suspension of the trial.

With this in mind, there has been a significant improvement in recent years, especially in terms of regulation. But there is still much to be done, especially as regards the effective implementation of the regulation.

The victims discussed here have taken been relegated to an unjustified second place in Crime Victim Services strategies in general, in contrast to their needs and the large number they represent, due to the lack of visibility resulting from the devalued consideration of road crime. (Ruling 3/16, app. 6.2).

According to recent opinion 1/2021 (app. 2.9), in general the victims of these crimes do not receive, despite the efforts made, due legal and moral attention at police stations, in the courts or from Victims' Assistance Offices. Like all other victims, they suffer secondary victimisation caused by court processes and delays with them, and their rights (including compensation) are not always duly respected, with frequent and well-founded complaints of neglect and misinformation. They suffer undue discrimination against other victims of crime, despite the large number of them and the significant penalties for the most serious crimes, in particular in Art. 142a. In addition to the fact that victims of accidents, as soon as there is evidence of offences under Art. 142 and 152 Criminal Code, both serious and less serious, are granted the status set out in Art. 2 of the Statute of Victims.

The system for the assessment of damages caused to persons in traffic accidents (the so-called *scale*) is regulated in Title IV of the Consolidated Text of the Law on Civil Liability and Insurance in the Circulation of Motor Vehicles (LRCSVM) and is introduced by Law 35/2015, of 22 September, *on the reform of the system for the valuation of damages caused to persons in traffic accidents*. The new regulations established by Law 35/2015, together with clear technical improvements, present complexities in terms of their application.

A good example of the special attention that the Public Prosecutors Office wants to give to victims is the fact that the Public Prosecutors Office's Training Plan includes courses on the scale of charges given to prosecutors so that they are properly trained and thus guarantee the correct application of the system for the assessment of damages and the protection of the economic and procedural rights of victims.

## 10. CONCLUSIONS

As a brief conclusion to all of the above, we can indicate that the need for a specialised Public Prosecutor's Office for road safety can be justified from different perspectives.

Firstly, the quantitative importance of road safety matters must be assessed: they account for one third of the prosecution's indictments and of the convictions handed down by the courts, as the statistics show.



Secondly, we cannot forget the qualitative importance of the legal rights that are ultimately at stake, either directly (crimes of result) or indirectly (crimes of danger), which are of the highest level: life, physical integrity and health.

Thirdly, consideration must be given to the victims. If we combine the two previous points we will see that both the number (although in this case, we restrict the number to resulting crimes, but based on statistics) and the importance of the victims (people with different kinds of injuries or who have lost close family members) are an expression of a reality that must be highlighted.

Fourthly, the complexity of road safety (non-legal matters, non-criminal rules and numerous reforms and State Attorney General doctrine) is also another component that must be given consideration.

Finally, the constant evolution of mobility and road safety (as pointed out in the *2030 Road Safety Strategy*) has to be taken into account and requires specialised training.



**BIBLIOGRAPHY**

CARDENAL MONTRAVETA, S., "Delitos contra la seguridad vial (arts. 379-385b)", in AAVV (dir. CORCOY BIDASOLO, M.), *Manual de Derecho Penal, Parte Especial, Adaptado a las LLOO 1/2019 y 2/2019 de Reforma del Código Penal, Doctrina y jurisprudencia con casos solucionados*, Tirant lo Blanch, Valencia, 2019.

CRESPO BARQUERO, P., "La reforma orgánica del Ministerio Fiscal: Fiscalía General del Estado. Relaciones institucionales y órganos centrales", *Summer School of the Public Prosecutor's Office, 2014*, at <https://www.cej-mjusticia.es/sede/publicaciones>.

DE VICENTE MARTÍNEZ, R., *Siniestralidad vial, delitos imprudentes y fuga*, Reus, Madrid, 2019.

ESCUCHURRI AISA, E., "Delitos contra la seguridad vial", in AAVV (dir. Romeo Casabona, Sola Reche, Boldova Pasamar) *Derecho Penal, Parte Especial, Conforme a las Leyes Orgánicas 1 y 2/2015, de 30 de marzo*, Granada, 2016.

GARCÍA-VALLE PÉREZ, M., *La responsabilidad por daños en accidentes con patinetes eléctricos*, Atelier, 2022.

GONZÁLEZ CUSSAC, J. L., "(Comunicación) La reforma penal de los delitos contra la seguridad vial (Proyecto 2006)", in *Derecho Penal y Seguridad Vial*, Estudios de Derecho Judicial, 114, CGPJ, 2007.

LIJARCIO, I., CATALÁ, C., USECHE, S., ROMANÍ, J. Y LLAMAZARES, J., *Gestión de la Movilidad y la Seguridad Vial en Euskadi después del Covid-19*, report by FESVIAL (Fundación para la Seguridad Vial) for the Department of Traffic, Department of Safety of the Basque Government, 2021, at <https://fesvial.es/wp-content/uploads/2022/04/Informe-Gesmovid-21-FINAL.pdf>.

MENA ÁLVAREZ, J. M., "El delito de conducción temeraria", in *Derecho Penal y Seguridad Vial*, Estudios de Derecho Judicial, 114, CGPJ, 2007.

MONTORO GONZÁLEZ, L., ALONSO PLA, F., ESTEBAN MARTÍNEZ, C., TOLEDO CASTILLO, F., *Manual de Seguridad Vial: el factor humano*, Ariel, 1st edition, 2000.

MORELL ALDANA, L. C., *Delitos contra la seguridad vial y siniestralidad de los nuevos tipos de vehículo*, Wolters Kluwer, 2019.



**Vicente Magro Servet**  
Magistrate of Supreme Court  
Doctor of Law

**PRAXIS OF THE OFFENCE OF FLEEING  
THE SCENE OF AN ACCIDENT IN ART. 382  
BIS CRIMINAL CODE (ORGANIC LAW  
2/2019 OF 1 MARCH 2019 AND ORGANIC  
LAW 11/2022 OF 13 SEPTEMBER).**



**PRAXIS OF THE OFFENCE OF FLEEING THE SCENE OF AN ACCIDENT IN ART. 382 BIS CRIMINAL CODE (ORGANIC LAW 2/2019 OF 1 MARCH 2019 AND ORGANIC LAW 11/2022 OF 13 SEPTEMBER).**

**Summary:** 1. Introduction. 2. Analysis of the evolution of the reform that gave rise to organic law 2/2019 of 1 March. 3. Organic law 11/2022, of September 13, modifying the penal code regarding the reckless driving of motor vehicles or scooters, amending art. 382 bis of the Criminal Code. 4.- Analysis of Supreme Court Ruling 1/2023 of 18 Jan. 2023, appeal no. 10404/2022. a. Legal right protected by the offence under art. 382 bis of the Criminal Code. b. The person responsible is also the cause of the accident. c. This is a "fleeing" offence. d. The first instance ruling and ruling on appeal considered that the crime had attempted. Do imperfect forms of execution apply to the offence of fleeing the scene?

**Resumen:** (Análisis acerca de las características y circunstancias del delito de fuga del lugar del accidente que se incorporó en el texto penal en la LO 2/2019 de 1 de Marzo, modificado por LO 11/2022, de 13 de septiembre, con la finalidad de evitar situaciones de impunidad cuando un conductor golpeaba con su vehículo a otro y fallecía en el acto y se daba a la fuga no pudiendo, además del homicidio imprudente, o en su caso homicidio doloso eventual si se dieran las circunstancias, calificarlo antes de esta reforma como omisión del deber de socorro si había muerto la víctima. Sentencia del Tribunal Supremo 1/2023 de 18 de Enero analizando si cabe la tentativa en estos casos)

**Abstract:** (Analysis about the characteristics and circumstances of the crime of escape from the place of the accident that was incorporated into the criminal text in LO 2/2019 of March 1, modified by LO 11/2022, of September 13, with the purpose of avoid situations of impunity when a driver hit another with his vehicle and died on the spot and fled, not being able, in addition to reckless homicide, or eventual intentional homicide if the circumstances arose, to qualify it before this reform as an omission of the duty to help if the victim had died. Supreme Court Judgment 1/2023 of January 18, analyzing whether the attempt is possible in these cases)

**Palabras clave:** delito de fuga del lugar del accidente, caso fortuito, imprudencia

**Keywords:** Crime of escape from the place of the accident, act of God, recklessness

## 1. Introduction.

It is interesting, and strange to say the least, that some drivers who have a traffic accident and collide into somebody or run over a pedestrian react by fleeing from the scene of the accident, trying to avoid the consequences of the accident with a motor vehicle, instead of worrying about the person they have run over, or the occupants of the vehicle into which they have collided on account of their reckless behaviour or also due to unforeseen circumstances.

Ultimately, it may be more an act of cowardice and of not wanting to assume the responsibilities caused by their imprudence and wanting to run away from their own responsibilities, especially if they consider that they may have killed someone. Of course, such an event is extremely serious and the persons affected by somebody having been killed by a hit-and-run driver or who have been run over by a driver who then flees the scene will never be able to accept that they have lost a family member, but that, in addition, whoever killed him has left them on the road as if he were an object in agony, when, perhaps, if they had called an ambulance immediately, they would have saved their life.

The question we must ask ourselves is an important one: how many people would have remained alive if whoever hit them, or collided with them, had remained at the scene of the accident instead of fleeing and alerted the ambulance services. We would most definitely shake our heads, as first aid could have been crucial in saving the life of the victim instead of the perpetrator leaving them to die on the tarmac. It is therefore regrettable that such selfishness reigns in the heads of many people who, in order to avoid a possible conviction, are capable of leaving another person on the road half dead, or not knowing if they are dead, in order to avoid having their licence taken away and to avoid finding out who the perpetrator was.

The important thing is to know that in most cases the perpetrator will be discovered and will be held responsible for these reprehensible acts. The problem is that what led to Organic Law 2/2019 of 1 March was the volume of acquittals that existed before this reform for the crime of failing to give assistance under Art. 195 Criminal Code<sup>1</sup> when it was alleged that the victim was already dead when the collision occurred

---

<sup>1</sup> **Supreme Court, Second Criminal Chamber, Ruling 761/2022 of 15 Sep. 2022, Appeal No. 10768/2021:** Confirmation of acquittal. If there are several persons who are situationally obliged, the duty of assistance does not apply when the person in need is already being assisted by another obliged person and the hypothetical contribution of the one who omits the duty would not contribute anything to the elimination or reduction of the serious danger. The person to be assisted must be in a situation of manifest and serious danger, they must also be helpless, the person obliged to provide assistance must know that such a situation exists and that they are able, without risk to himself or herself or to others, to provide assistance personally or to request assistance from a third party. Criminally relevant helplessness encompasses both absolute helplessness, when the person in need receives no help at all, and relative helplessness, or insufficient protection, although in the latter case it must be assessed whether the residual danger, that which derives from incomplete help, is still serious. Otherwise, the omission would remain criminally irrelevant due to the lack of an essential precondition of the offence. In this case, helplessness is excluded from the moment it is declared proven that four people immediately and continuously provided assistance to the person who had been hit, carrying out manoeuvres to better position the body that had fallen onto the asphalt and synchronously alerting the emergency services, who, moreover, arrived very shortly afterwards.

**Supreme Court, Second Chamber, Criminal Division, Ruling 167/2022 of 24 Feb. 2022, Appeal No. 3633/2021**

and "there was nothing left to do", because the essence of the crime was the fleeing of the scene, specifically in relation to the failure to provide assistance rather than fleeing the scene in itself, because one could not "help" someone who was already dead. In any case, the question was by no means a trivial one, because how was it possible to know whether the person who had been hit was dead or the vehicle involved in the collision?

The findings suggested that the scope of the accident and the final position of the deceased and the forensic report on the predicted time of death were the evidence that determined the time of death and the circumstances in which death had occurred. It was this data that was assessed at trial to determine whether the victim could have been dead when the hit-and-run driver fled the scene.

It was therefore necessary to reform the criminal text so as not to leave unpunished, at least from the perspective of fleeing the scene, this type of action that should be punished under the same terms as collisions or hit-and-runs and the degree of imprudence, if applicable, or the crime of intentional homicide with malice aforethought that could have been committed.

It should be remembered that when this reform was processed in the successive appearances made in Parliament, the media recalled that "Of the 174,679 drivers involved in a traffic accident in 2016, 1,028 (0.6% of the total) fled the scene, according to data from the Department of Traffic made public by the coordinating prosecutor for Road Safety, Bartolomé Vargas at the Justice Commission of Congress where the bill proposed by the Popular Party to toughen penalties for drivers for recklessness and leaving the scene is subject to study."<sup>2</sup>

The aim was to bring to light something that was occurring frequently and which was a real act of "evil" as set out in the law, whereby there are people who flee from a crime they have committed through recklessness, or which may have occurred by chance, and who, although they were not at fault, their first impulse was to flee from the scene of the accident, something that is unworthy of human nature, but which many people resort to, cruelly leaving a person on the road dying and being able to think more about themselves and the possible criminal response that their conduct may bring them than about the life of another human being.

In this type of case, the investigative action of the State Security Forces is essential, as the Spanish Civil Guard's traffic section has extensive knowledge in the preparation of reports on this subject and clarity is needed in the regulations to

---

Acquittal. Absolute unfitness due to the instant death of the victim of the collision, in this case, a cyclist. It is not possible to help someone who is no longer susceptible to being helped. And it is precisely for this reason that the omission of an expected action cannot be written-off when, had that action been carried out, it would not have affected the indemnity of the protected legal interest in any way, be it the safety of life and physical integrity, or solidarity. The doubt about instant death or within 20 minutes of the hit-and-run must be in the defendant's favour.

**Supreme Court, Second Chamber, Criminal Division, Ruling 420/2023 of 31 May. 2023, Appeal No. 6373/2021**

FAILURE TO GIVE ASSISTANCE. Acquittal. Death almost immediately after being hit by a car. The objective element of the existence of a helpless person in serious and manifest danger is absent; this can occur either because the perpetrator has ascertained that the victim is being assisted, or in the case of immediate death.

<sup>2</sup> <https://compromiso.atresmedia.com/ponlefreno/noticia>.

understand how to proceed in each case. In any case, the high level of professionalism of the Civil Guard guarantees perfect work in this and other matters related to road safety, and the proof of the commitment to training is the production of this journal, which allows all members of the Civil Guard to relay the appropriate knowledge in many areas, such as road safety, which is basic for a correct professional service in the preparation of the accident scene report.

## 2. Analysis of the evolution of the reform that gave rise to Organic Law 2/2019 of 1 March.

When the need to provide a solution to the acquittals for the crime of failing to give assistance under art. 195 of the Criminal Code was identified in these cases of fleeing the scene of the accident with a deceased person, the Spanish Congress of Deputies started hearings in relation to the proposed organic law amending Organic Law 10/1995, of 23 November, of the Criminal Code, in relation to imprudence in driving of motor vehicles or scooters and punishment for abandoning the scene of the accident.

This initiative gave rise to the reform of the Criminal Code under Organic Law 2/2019, of 1 March, which modified different aspects of the Criminal Code, specifically, Arts. 142, 142 bis, 152, 152 bis and 382 bis, the latter, which is the subject of these lines, is of transcendental importance for punishing the conduct of those drivers who "flee" from the scene of an accident, but more in relation to the "hit and run" aspect than "failing to give assistance" which was already punishable under Art. 195 of the Criminal Code, since "fleeing" as such was not punished, and the classification of the failure to give assistance left serious conduct without assistance, as when "there was no assistance that could be provided" in the event that the victim of the accident was dead as a result of the accident, it was impossible to be convicted under art. 195 Criminal Code.

As reflected in Opinion 1/2021, of 17 March 2021, on the reform of articles 142, 142 bis, 152, 152 bis, 382 and 382 bis of the Criminal Code, implemented by Law 2/2019, referring to the new concept of less serious negligence, serious negligence, aggravation of penalties in the multiple outcomes, criminal modification, criteria for the initiation of police and court proceedings, rights of accident victims and the new crime of fleeing the scene in relation to road traffic, "the so-called crime of fleeing the scene comes from Anglo-Saxon legislation, more colloquially *hit and run*, which is rigorously punished, having been extended to other European countries".

As already indicated at the time<sup>3</sup> "a new criminal offence is introduced in addition to the offence of failure to provide assistance under Art. 195, which punishes the offence of fleeing the scene of the crime having committed a criminal offence under art. 142 or recklessly or fortuitously causing injuries under Arts. 147.1, 149 and 150 of the Criminal Code. In this case, it is not necessary for the victim to be helpless and in manifest and serious danger, which is part of the offence of omission of the duty to provide assistance in Art. 195 of the Criminal Code. Therefore, if an accident is caused resulting in death and injury to the persons covered by Arts. 147.1, 149 and 150 of the Criminal Code, this offence is committed if the driver flees, under a new offence

---

<sup>3</sup> The new offence of fleeing in Art. 382 bis Criminal Code in road accidents. Vicente Magro Servet, Magistrate of the Criminal Division of the Supreme Court, Doctor of Law, Diario La Ley, No. 9346, Doctrine Section, 28 January 2019, Wolters Kluwer



referred to as "fleeing", or "leaving the scene of the accident". This would work as a new offence in addition to the specific offence committed by imprudence in the actual commission of the offence. However, it should be noted that it is not necessary for the initial conduct to be qualified as gross negligence or lesser negligence, as it only mentions that an accident was caused, so it could be qualified as minor negligence. The offence is committed when "fleeing".

We must highlight that during the parliamentary session held in the Congress of Deputies on 21 February 2018, the Public Prosecutor of the Supreme Court responsible for coordinating road safety, Bartolome Vargas, now retired, and currently exercising this position in the Supreme Court Luis del Río, outlining the effort being made to detect those gaps in the criminal system, stressed that: "There is a network of seventy specialist deputy prosecutors who set a scientific and legal benchmark at a national level. We approach the phenomenon of road accidents from the perspective of the European Union's strategies: *education*, *engineering* and *enforcement*. The *enforcement* strategy in our country is made up of the administrative sanction of the Road Safety Law (Articles 74 to 81) and the criminal sanction (Articles 142 and 152), which we are dealing with here, and Articles 379 to 385 of the Criminal Code. Criminal law is governed by the principle of minimum intervention and its use cannot excuse the use of educational and preventive responses, which are always more effective.

With this in mind, one of the most important issues detected was that of drivers who were recklessly responsible for a traffic accident, or who accidentally collided with someone and killing them, abandoning the scene of the accident and leaving the person dead at the scene of the accident. It was not simply a matter of failing to assist, but that given the magnitude of the impact, the driver clearly anticipated that the victim had been killed and left the scene. This required the fact that they had left the scene be punished, rather than the fact of "failing to provide assistance", as there was nothing left to assist in the foreseeable death of the other driver or pedestrian.

This led to the inclusion, in the law ultimately approved, of the new criminal offence of "fleeing" in Art. 382 bis of the Criminal Code<sup>4</sup>, which consisted of:

---

<sup>4</sup> **Supreme Court, Second Chamber, Criminal Division, Ruling 167/2022 of 24 Feb. 2022, Appeal No. 3633/2021**

This corresponds to Art. 382 bis of the Criminal Code, included within the crimes against collective safety, and more specifically against road safety, a precept which includes the so-called "crime of fleeing" which is described as the attitude of the driver who, without any risk to themselves or others, leaves the scene of the accident resulting in the death of one or more people or injuries of Art. 152.2 of the Criminal Code. Different penalties are foreseen depending on whether the accident was caused by the driver's negligence or by an act of God. For the offence of leaving the scene of an accident to be committed, it is not necessary that the requirements of the offence of omission of the duty to render assistance are met.

Thus, in this way, the crime of fleeing is subsidiary to the crime of omission of the duty to provide assistance, as it refers to persons who have suffered serious injuries, but the characteristics of the situation that require a duty to provide assistance are not present.

In this sense, the preamble of Organic Law 2/2019, of 1 March, states that the aim is for this new offence to punish "the intrinsic evil involved by the abandonment of those who know they are leaving behind someone who could be injured or even dead, the lack of solidarity with the victims, which is criminally relevant on account of the direct involvement in the accident prior to abandonment, and the legitimate expectations of pedestrians, cyclists or drivers of any motor vehicle or scooter, to be cared for in the event of a traffic accident".

*1. The driver of a motor vehicle or scooter who, outside the cases contemplated in Article 195, voluntarily and without risk to themselves or others, leave the scene of the accident after causing an accident in which one or more persons are killed or in which any of the injuries referred to in Articles 147.1, 152.2 and 150 are caused, shall be written-off as the perpetrator of the crime of leaving the scene of the accident.*

*2. The acts referred to in this Article which are the result of recklessness demonstrated by the driver shall be punishable by imprisonment for a term of six months to four years and a ban from driving motor vehicles and scooters for a term of one to four years.*

*3. If the circumstances giving rise to fleeing the scene were caused by an act of God, they shall be sentenced to three to six months' imprisonment and shall be banned from driving motor vehicles and scooters for a period of six months to two years.*

Then, we will see the reform approved later to resolve the errors of this reform to this text, which left out actions caused by serious negligence.

Mr. LÓPEZ CERRÓN, president of the Royal Spanish Cycling Federation, said at the aforementioned session that “we are seeing accidents in which people leave the injured person without knowing whether they have died or not, whether they are serious or not, and they flee for many reasons. It is likely that most of them flee the scene because of irregular circumstances: they are uninsured, drunk or under the influence of drugs. What is clear is that right now, the person who flees the scene is not penalised and so it will be better for him to flee, even if they are then arrested, than to stay and help the injured person; there is no reason for them to do so”.

---

It then goes on to affirm the subsidiary nature of this type of offence in relation to Art. 195.3 criminal Code for cases of injury through the provision contained in the text, "referring to cases of people who suffer serious injuries but in which the requirements of manifest and serious danger are not met, which requires the omission of the duty to provide assistance".

As also reflected in the preamble, the aforementioned Organic Law responds to an important social demand, given the increase in accidents involving pedestrians and cyclists due to reckless conduct of motor vehicle or scooter drivers. This social demand was based precisely on the fact that the requirement established in the offence of the failure to provide assistance in Art. 195 Criminal Code that the victim must be helpless and in manifest and serious danger, had resulted in court rulings that did not involve a conviction for people who abandoned the victim after the accident.

Accordingly, the creation of the new rule was justified by the need to cover cases which, under existing legislation, were outside the scope of the criminal response, such as the case where the injured person was not left helpless and in serious and manifest danger.

Along these lines, a sector of doctrine justifies the criminalisation in the Criminal Code of the so-called crime of fleeing the scene precisely because, unlike the 1973 Criminal Code, the current Criminal Code does not contain a provision in which, in cases in which it is impossible to execute or produce the crime, the penalty is imposed one or two degrees lower than that established for the crime in question, in cases of non-existence of the object or lack of aptitude of means (such as the impossibility of resorting to the failure to provide assistance, in cases in which the victim died in the act).

In short, the aforementioned precept would cover cases that are difficult to fit into the crime of the failure to provide assistance due to the lack of the objective element of the existence of a helpless person in serious and manifest danger. This can occur either because the perpetrator has ascertained that the victim is being assisted or in the case of immediate death.

Whether we like it or not, every legal modification always has (and this is not negative) a *raison d'être* focussed on a specific case that shows that "there is still something wrong with the system for leaving aspects unregulated". And in this case Mr LÓPEZ CERRÓN stressed that: "Anna González, who, after the death of her husband, the victim of a hit-and-run driver, was faced with a sentence that had no logical explanation for anybody, even non-family members. The movement that Anna called "Por una ley justa" ("*For a fair law*") is one that has managed to ensure that we are debating this bill today and that in some way, I was also there when this was debated in Congress, all the parliamentary groups have supported the need to change these laws". He added with regard to the need to introduce the offence of hit-and-run in the Criminal Code that "this situation is aggravated when the perpetrator of the accident flees after the hit-and-run, as in the case of Anna's husband, which unfortunately happens quite often".

On the objective to be protected by the introduction of this new offence, Mr BATALLER I RUIZ stressed that "we have to consider what legal right we are protecting with it, and you have contributed some ideas in this respect. We could emphasise, for example, that when someone flees after causing an accident, what they are doing is disregarding the dignity of the victim, whom they leave behind without knowing whether they are dead, badly injured or whether they could have been helped by their intervention or not. Or we could also think that the emphasis should be on the protection of general interests, i.e. the right to safe, sustainable traffic and so on. Or we could also think that the work of public administrations must be protected and that with this new type of crime we would be punishing those who evade justice".

However, beyond the theoretical and conceptual issue of what is, in reality, the legal right protected by this new offence introduced by this reform, it was necessary to delve deeper into an issue that underlies Supreme Court ruling 284/2021, of 30 March, to which we will refer later, and that is the question of when we dealing with a hit-and-run offence, whether we should demand that it is only possible in cases of death when the driver was absolutely certain that the person they ran over was dead. This should be ruled out in favour of the *high likelihood* that this would be the case, given the impact caused.

This led Ms RIVERA ANDRÉS to point out in her parliamentary speech that it is "totally illogical for a person who causes an accident to flee and nothing happens to them if the person they have hit has died; it makes no sense at all. Why? Because nobody can know when they hit a person that said person, the cyclist, the pedestrian, the motorist or the person who was the subject of the accident, had died. In fact, at an accident scene, only the judge can authorise the removal of the body and certify the death. So it seems to me that this is a moral issue and it is clear that under no circumstances is it acceptance that today, it is more advantageous to leave the scene of an accident, to flee, than to stay. I think it is only fair and logical that this should be changed in the Criminal Code".

In the same vein, Ms ALBA MULLOR pointed out that: "It also means that, in addition to the failure to give assistance, the *intrinsic evil of abandoning someone who may be injured or even dead is also punishable*. It is regrettable, but it is also a reality and recent accidents demonstrate that this is the case and that such behaviour cannot go unpunished, as you have reminded us throughout your speech.

In addition, it is required that when there are several parties involved, all of them remain at the scene of the accident, as *the principle of solidarity* applies to all those involved. As part of the proposed reform, fleeing the scene will have the same criminal punishment whether the victim is injured or has died, thus correcting circumstances that could occur under the current regulation, by which, if death is immediate, there is nobody to provide assistance to and therefore no conduct that deserves any criminal punishment, which is something that must be changed and this is reflected in the reform".

The injustice in these cases is the grounds for the legal reform to avoid impunity when leaving the scene of the accident in serious cases where a person has been left dead on the road with the absolute absence of solidarity and "intrinsic evil" reflected in the preamble of the rule that involves an accident with a person and fleeing the scene without ascertaining the circumstances left behind. It was clear from the parliamentary debate that the aim of the reform was to avoid impunity for circumstances such as those referred to where "there was no possible assistance" when as a result of the accident, there was an absolute possibility that death had been caused.

With regard to the expression *intrinsic evil*, referred to in the explanatory memorandum of Organic Law 2/2019, CASTRO MORENO<sup>5</sup> points out that "this is clearly an excess, since criminal law should be limited, in any case, to punishing "extrinsic" evil, understood as conduct (not inner thought) that transcends the relevant injury or endangering of important legal assets in the outside world".

And this action of "leaving the scene" or "fleeing" is performed with malice that may be potential, in other words, considering the high possibility that the victim is dead and this leads to the belief or conviction, as well as the high likelihood that the pedestrian has been killed, which leads to an instantaneous consideration of the cause of the accident, completed with the ex post confirmation of the victim's death, to conclude that the death occurred, and therefore the crime of fleeing the scene is applicable, but which is only applicable for cases occurring after 3 March 2019, not previous cases for which, as stated in the aforementioned judgement, the action would be atypical. This is also reflected in the Preamble of the Law, which states that "this is a *different conduct and, this time, it is wilful and independent of the previous reckless or unforeseen conduct*". Therefore, the act of fleeing the scene is intentional, and this may entail malice aforethought in the admission of death, which makes the offence of fleeing the scene applicable, rather than the failure to provide assistance, the former being punished with a heavier penalty than the latter, as we have seen.

LANZAROTE MARTÍNEZ<sup>6</sup> points out in this respect that: "The new Article 382 bis would cover cases that are difficult to consider under the crime of failure to give assistance "(...) due to the lack of the objective element of the existence of a helpless person in serious and manifest danger, such as the failure to provide assistance when the

---

<sup>5</sup> CASTRO MORENO, A., "Comentario crítico a la LO 2/2019, de 1 de marzo, de reforma del Código penal, en materia de imprudencia en la conducción de vehículos a motor y ciclomotores: nuevo delito de abandono del lugar del accidente", La Ley Penal, No. 138, Ed. Wolters Kluwers, Madrid, 2019, electronic format.

<sup>6</sup> LANZAROTE MARTÍNEZ, P., "El nuevo delito de abandono del lugar del accidente y otras importantes novedades de la inminente reforma del Código Penal en materia de imprudencia", Diario La Ley, No. 9359, Sección Tribuna, Ed. Wolters Kluwers, Madrid, 2019, electronic format.

active subject has ascertained that the victim is being assisted or the aforementioned cases of death ipso facto".

MORELL ALDANA<sup>7</sup> adds that: "It is also an eminently intentional crime, as can be seen from the use of the expression "wilfully", and we are in favour of admitting direct, indirect or eventual wilful intent. To this, we add the argument that recklessness in the Criminal Code of 1995 follows the system of culpable crime, in such a way that, since recklessness is not expressly provided for in Article 12 of the Criminal Code for the offence of fleeing the scene, such conduct cannot be punished in the criminal sphere. It must also be classified as a subsidiary type, as the criminal lawmakers have expressly provided for its subsidiary application in relation to the crime of the failure to provide assistance in Article 195 of the Criminal Code".

### 3. Organic Law 11/2022, of September 13, modifying the Penal Code regarding the reckless driving of motor vehicles or scooters, amending Art. 382 bis of the Criminal Code

As highlighted, the criminalisation of the offence of fleeing the scene dates to Organic Law 2/2019, of 1 March, which sought to counter the impunity that existed in cases of the driver causing the accident fleeing the scene when the person hit or the victim of an accident had died, rendering Art. 195 Criminal Code on the failure to provide assistance inapplicable.

However, an error was detected in the text of the reform that created Art. 382 bis Criminal Code, based on the fact that it was not appreciated that, if the circumstances took place through serious negligence, fleeing the scene was not punishable, as the imprudence was reduced to less serious negligence by the wording of the text approved.

This led to the approval of Organic Law 11/2022, of September 13, modifying the Penal Code regarding the reckless driving of motor vehicles or scooters, amending Art. 382 bis of the Criminal Code in the following terms:

*Article 382a(1) shall read as follows:*

*"1. The driver of a motor vehicle or moped who, outside the cases contemplated in Article 195, voluntarily and without risk to themselves or others, **leave the scene of the accident after causing an accident in which one or more persons are killed or in which any of the injuries referred to in Articles 147.1, 149 and 150 are caused, shall be punished as the perpetrator of the crime of leaving the scene of the accident**".*

Thus, it was no longer a reference to Art. 152.2 Criminal Code and the less serious type of imprudence, but all types of imprudence are now punishable.

The circumstances of the offence of fleeing the scene have been subject to repeated debate. A criminal offence with characteristics inherent to a *system of lack of solidarity* of some drivers who prefer to flee from the place where an accident occurred

---

<sup>7</sup> El delito de fuga: un «viejo» conocido de la dogmática penal. visión doctrinal tras su reintroducción por la LO 2/2019. Morell Aldana, Laura Cristina. Magistrate at the Court of First Instance and Preliminary Investigation No. 4 of Alcoy Doctor of Law Diario La Ley, No. 9687, Sección Tribuna, September 2020, Wolters Kluwer



involving them; hence the need for the criminal punishment defined in the precept approved in 2019, and with the rectification made in 2022, to avoid situations of impunity caused by the wording of the precept in 2019, which had left out situations of serious imprudence with the driver of the vehicle fleeing.

This is a criminal offence characterised, above all, by a *lack of respect* for others and by a personal attempt on the part of drivers to shift any kind of responsibility for the driving of motor vehicles to their own benefit and to cancel out any harm, as opposed to the other side of the scale where the victims are those affected by accidents in which the hit-and-run driver has been involved.

As a result, the decision taken by the driver at the time of the accident to flee the scene of the accident entails a *self-exemption from liability*, leaving the victims at the scene of the accident caused by his irresponsibility, and denotes the need for the rule of law to intervene, not only with administrative infractions and sanctions, but also with a criminal sanction that should be allocated to conduct such as fleeing the scene of a traffic accident in which the hit-and-run driver has been involved and caused the accident.

The lawmaker has been required to intervene in this type of cases in view of the increase in these circumstances and the impunity arising due to the legal vacuum caused by the wording of the crime of failure to provide assistance in Article 195 of the Criminal Code, which was wholly insufficient when it came to covering situations of fleeing the scene of the accident.

The offence consists of the abandonment of the scene of the accident, an expression which is used at two points in the first section of Article 382 bis PC and in accidents caused thereby, with the second section distinguishing when any of the punishable imprudences have concurred or not, the third section concerning when the action was unforeseen, prorating the penalty based on these two circumstances.

However, the key is that the action that determining the typical and punishable conduct is the abandonment of the scene of an accident: after having caused the accident, the person flees in their motor vehicle, abandoning not only the scene, but also their own responsibilities for having caused the accident when the second paragraph applies to reckless conduct or when it has occurred due to an act of God pursuant to the third paragraph.

However, in any case, the action is characterised by the aforementioned absence of solidarity, whether this refers to the reckless conduct of the driver, or to an act of God, in both situations the criminal factor is evident, having left the scene of the accident instead of providing aid and assistance to the victims, abandoning them and placing a higher priority on their personal self-protection in avoiding criminal and civil liability than to worrying about the situation in which the victims, even when caused by an act of God, have been left, as should have been the case.

It is worth remembering that when establishing the scope of criminal liability in terms of the system of penalties under Article 382 bis of the Criminal Code, consideration should be given to the fact that the applicable penalty ranges from six months to four years in the second paragraph, when conduct is reckless, and this broad

range allows the penalty to be prorated and adapted to the circumstances by the judge, depending on the type of recklessness involved in this case.

The key when it comes to calculating the penalty can be traced to the fact that the reform approved under Organic Law 11/2022, of 13 September, now avoids the atypical nature of serious negligence and now includes it in the criminal category, allowing for cases of serious negligence concurrent with abandonment of the scene of the accident to adapt the penalty to the maximum pursuant to Article 66.1.6 of the Criminal Code, when there are no mitigating and aggravating circumstances. The judge may seek the imposition of the maximum sentence of four years in prison without the possibility of applying the suspension in the execution of the sentence, including as part of this decision the type of recklessness involved in the case, which may be serious, less serious or minor, since here we are not dealing with the atypical circumstances of minor imprudence, but that minor imprudence concurrent with the crime of fleeing the scene is typical under Article 382 bis. And it is not a matter, therefore, of the minor conduct being outside the criminal sanction, but rather that if the conduct of the perpetrator of the accident were minor, a lesser punishment could well be established than in the case of serious or less serious negligence.

In any case, the criminal sanction is the same in all three situations, since the seriousness is about fleeing the scene of the accident, rather than the type of negligence involved in the case.

#### **4.- Analysis of Supreme Court Ruling 1/2023 of 18 Jan. 2023, Appeal No. 10404/2022**

Having introduced the details of the criminal offence under Art. 382 bis of the Criminal Code, the important ruling of the Criminal Division of the Supreme Court 1/2023 of 18 Jan. 2023, Case 10404/2022, analysing this new criminal offence, is worth analysis.

In this case, the appellant complained about the infringement of Article 382 bis of the Criminal Code (CC), having assessed the offence as an attempted offence, when, according to the appellant, it should have been assessed as an actual offence.

Below is a systematic look at the analysis of the High Court's findings.

##### *a. Legal right protected by the offence under art. 382 bis of the Criminal Code.*

The Supreme Court recalled that "this criminal offence does not require, therefore, as an element of the offence, that a person be helpless and in manifest and serious danger, as is the case in Article 195 of the Criminal Code, nor, correlatively, that the act of assistance could be potentially useful. The provision expressly states that only cases not covered by Article 195 are punishable".

As such, the Supreme Court stresses that it is a criminal offence to cover the gaps left by the offence of the failure to give assistance, which did not fully "attend" to situations such as those described in the criminal offence of Art. 382 bis of the Criminal Code.



The Supreme Court then referred to a much discussed question as to why the criminal offence was introduced as a kind of "contempt" for victims when they were hit by or run over by the hit-and-run driver. It specified that "Although the doctrine, which has abundantly criticised the reference in the Statement of Reasons to "intrinsic evil" because of its relation to moral concepts, has not been unanimous in identifying the legal right protected, both case law and the majority of dogmatics, taking into account the content of the Preamble to the Organic Law cited above, speak of the *infringement of a duty of human solidarity which is elevated to the rank of a legal duty*".

Having said this, the Supreme Court considered that here, we are dealing with a kind of "crime of indifference", insofar as it points out that: "It has been said that the omitting party's indifference to the victim's situation of danger is to be punished (Supreme Court Ruling No. 167/2022, 24 February). In fact, more precisely, this indifference to the situation created is to be punished, having failed to comply with the duties imposed by Article 51 of Royal Legislative Decree 6/2015, of 30 October, approving the consolidated text of the Law on Traffic, Circulation of Motor Vehicles and Road Safety, amongst others, on those involved in a traffic accident, which includes the consideration of the danger to the victim, including other road users, as well as the duty to identify themselves as the person having caused the accident and to cooperate immediately in resolving it.

Article 51 of the aforementioned law stipulates that any road user involved in a traffic accident, witnesses it or has knowledge of it, is required to help or request help for any victims, to cooperate, to avoid further danger or damage, to restore, as far as possible, traffic safety and to clarify the events. This refers to solidarity with the victims through the provision of assistance; to the adoption of measures to maintain or restore road safety, i.e. solidarity with other road users, and specifically, to road safety itself, which may be affected by the accident; and to ensuring the effectiveness of the Administration's powers to investigate and clarify the circumstances surrounding traffic accidents, insofar as they directly affect road safety. It is true that with regard to the latter legal right, part of the doctrine has pointed out that it may affect the right not to testify against oneself. However, consideration should be given to the fact that the obligation to identify oneself as being involved in an accident does not imply an assumption of guilt or the provision of evidence.

This allows us to consider the concurrence of different legal interests as the object of protection, related in general with the requirements of solidarity, and specifically with the legitimate expectations of the victims to receive the care they need; of the other road users where the accident takes place and the necessary precautionary measures are adopted; and even with the requirement to identify the cause of the accident, from the perspective of the need to protect and guarantee road safety through the clarification of the circumstances by the competent authorities.

In other words, case law has also recalled that the Statement of Reasons invokes, as a reason for incrimination, the breach of the duties of citizenship based on the value of solidarity, thereby seeking to "cover cases that are difficult to fit into the crime of failure to give assistance because the objective element of the existence of a helpless person in serious and manifest danger is lacking", see Supreme Court Ruling No. 167/2022, of 24 February (Supreme Court Ruling No. 761/2022, of 15 September)".

*b. The person responsible is also the cause of the accident.*

This is a characteristic that separates it from the crime of failing to give assistance under Art. 195 of the Criminal Code, and stipulates that the perpetrator is the one who causes or is involved in the accident, and not a third party unrelated to the events, hence the Supreme Court points out that:

"The definition of the offence **reduces the criminal significance of the conduct to the person who can be considered to have caused the accident, excluding other parties involved.**

It should be noted, on the one hand, that in many cases this condition can only be established after an investigation. And, on the other hand, that the precept contemplates the liability of the person causing the accident, even if the origin of the events giving rise to the abandonment was fortuitous".

*c. This is a "fleeing" offence.*

Punishment is handed down for fleeing the scene of the accident, not being present at the scene and the passivity of the perpetrator, which could give rise to other conduct, but not the conduct under Art. 382 bis of the Criminal Code. If the person causing the accident remains there, but does not help, it could constitute an offence under Art. 195.1 of the Criminal Code, but not under Art. 382 bis of the Criminal Code.

Thus, the Supreme Court indicated that:

"Finally, consideration should be given to the fact that **the offence is not committed if the subject remains on the site, even when they are engaged in passive conduct, except in cases where the elements of the conduct provided for in Article 195 of the Criminal Code are present, which will then be the applicable provision.**

On the contrary, **the offence will be deemed to have been committed if the subject leaves the scene of the accident, even if the possible victims could be attended to by other persons;** even if road safety could be restored by third parties; and even if the subject could be clearly and immediately identified by other means, such as the existence of cameras at the scene or the presence of witnesses who could do so.

From this, it can be concluded that **what is relevant is the physical abandonment of the site** in such a way that the subject is materially unable to personally fulfil the duties legally imposed for the case, in protection of the legal assets affected".

*d. The first instance ruling and ruling on appeal considered that the crime had attempted. Do imperfect forms of execution apply to the offence of fleeing the scene?*

The issue under debate subject to analysis by the Supreme Court and that makes this ruling so important is that the High Court states that:

"The question to be examined here, therefore, is the possibility of it being an attempt, without it being necessary to examine many other aspects of the offence that

may be complex to interpret, such as, for example, those relating to what should be understood by "causing an accident" or the occurrence of injuries caused by serious negligence in Article 152.1 of the Criminal Code.

Part of the doctrine understands the term "attempt" as possible. Leaving aside evidentiary problems regarding the purpose of the action taken, an attempt to leave the scene of the crime when prevented by the action of third parties, before the actual physical abandonment takes place, would give rise to an attempt, which is only relatively ineffective and therefore punishable. Not, however, when the subject moves away from the site or hides in the surrounding area in such a way that it is actually impossible for them to fulfil their legally established duties to protect the legal rights in question.

In general, the offence requires, as mentioned above, that the perpetrator of the accident leaves the scene of the accident. The term used in the precept is somewhat ambiguous.

From an objective perspective, it requires, at least, physical distance from the site. A specific distance cannot be established in general terms, although the concealment or suppression of the presence of the person that caused the accident on the site should be equivalent to not remaining on the site in a position to comply with the duties imposed by the aforementioned article 51 of the Road Safety Law; and from the subjective perspective, the will to abandon the site and, therefore, fail to fulfil those duties as a necessary consequence, is necessary.

The proven facts demonstrate that *the accused, after the collision, got out of the vehicle he was driving in a hurry, started to run (in a different direction to the one in which the co-driver was heading), and was pursued by the officers who were already following the vehicle given his reckless driving, without losing sight of him, and proceeded to arrest him some 80 to 90 metres from the scene.*

Therefore, by **the time the pursuit began, he had effectively left the scene of the crime, with the clear intention of not remaining there, in breach of his legally imposed duties.**

Thus, in this case, **the accused, when arrested, had already physically left the scene of the accident, and had already harmed the legal rights protected, in that he did not remain at the scene of the accident and thus disregarded his duty of civic solidarity established in the law on road safety, both in relation to the danger caused to the victims, and with respect to his duty to avoid possible dangers to other road users, as well as to cooperate in the proper resolution of the situation created by causing the accident".**

We can see that the typical conduct of the offence in Art. 382 bis of the Criminal Code refers to the person who *abandons the scene after causing an accident.*

The Supreme Court thus focuses the answer as to whether or not an attempt is possible in the offence under Article 382 bis of the Criminal Code in relation to the action described in the offence as regards the abandonment of the scene of the accident and not to subsequent circumstances.

The consummation of the criminal offence would occur when "leaving the scene of the accident", even if in a specific circumstance they were pursued, for example, and caught by law enforcement officers and arrested, since the act of leaving the site of the accident would have already occurred, and there would be no criminal effect in terms of the imperfect form of execution. Mostly because the offence would have been "perfected" and consummated by affecting the legal right protected. Thus, by fleeing, a duty of human solidarity would already have been attacked and violated, elevated to the rank of a legal duty, functioning as the protected legal right.

As regards the attempt to offend indirectly related to the subject in question, the failure to give assistance, the **Supreme Court** also handed down **Ruling 284/2021 of 30 March, 2021, Appeal No. 2693/2019**, which dealt with a case in which the Provincial Court and the Criminal Court understood that the offence of failing to give assistance under examination in that case was committed in the form of an attempt.

The reasoning was as follows: *"...the crime was committed at the moment the perpetrator left the scene of the crime without checking the victim's condition, accepting the possibility of being in manifest and serious danger, as this is an attack on the legal right of human solidarity, which is within the scope of protection under the law, given that the inexorable result of death due to injuries incompatible with life, as in this case was confirmed by the forensic experts who testified in court, does not exclude the consummation of the crime if the death is not instantaneous because a few minutes had elapsed before death or because resuscitation measures had been performed by the medical services. However, **when death is instantaneous, this conduct must be punished as an attempted crime of failure to give assistance, as defined in Article 195 and 3 of the Criminal Code**".*

This assessment, that if the injured person dies on the spot and that the crime in the case of fleeing the scene is an attempted crime of failure to give assistance, is rejected by the High Court, recalling that, in any case, it would now be a crime of fleeing, as Article 382.bis(2) of the Criminal Code punishes the driver in question fleeing and leaving someone to die. In this case, for events that occurred before the entry into force of the reform and inclusion in the Criminal Code of Art. 382 bis of the Criminal Code, this type of event was not a crime of attempted omission of the failure to give assistance, but led to acquittal, a gap that has now been filled with the criminalisation of Art. 382 bis of the Criminal Code, the intention of which was to cover this type of absence of criminalisation for events such as the matter in hand.

Therefore, as in the case analysed in the High Court ruling under examination, the High Court indicated that:

"This Chamber, however, cannot agree with this line of argument. Art. 195 of the Criminal Code includes, in the objective offence, a situation of helplessness, a serious and manifest danger that imposes a duty to act that was omitted by the perpetrator. Therefore, the ability to receive such assistance is an element of the offence, the absence of which makes the classification ruling impossible.

And the impossibility of classifying the proven facts as constituting an offence under Art. 195 of the Criminal Code cannot be overcome, of course, with the confusing invocation of the doctrine of this Court on the subject of the unsuccessful attempt.

Article 16 of the Criminal Code has redefined attempt as opposed to its more classical interpretation, adding the term "objectively" ("by carrying out all or part of the actions which should objectively produce the result"). Objectively means that the perpetrator's plan or action, as well as the means used, "objectively" considered, are rationally capable of bringing about the result. The following are excluded from the punitive reaction: a) cases of unreal or imaginary attempts (when the action is, in any case and by essence, incapable of producing the end unsuccessfully sought by its perpetrator); b) the so-called "putative offences" (when the subject carries out an action that is not criminally defined, believing that it is), an inverse error of prohibition that under no circumstances can be criminally punished by imperative of the principle of lawfulness; c) and cases of impossible crimes *stricto sensu* by the absolute inexistence of purpose, which lack typical adequacy (lack of type); in other words, cases referred to by case law as absolute inappropriateness. In none of these circumstances should the actions objectively produce the typical result.

On the other hand, **cases in which the means used, "objectively" assessed *ex ante* and in accordance with general experience, are abstractly and rationally capable of causing the typical result of injury or danger (pursuant to Supreme Court Rulings including but not limited to 771/2014, 19 November; 1114/2009, 12 November; 963/2009, 7 October; 822/2008, 4 December).**

In the case at hand, **the instantaneous death suffered by the victim and described as such in the proven facts, is absolutely inappropriate. It is not possible to help someone who is no longer susceptible to being helped. And it is precisely for this reason that the omission of an expected action cannot be written-off when, had that action been carried out, it would not have affected the indemnity of the protected legal interest in any way, be it the safety of life and physical integrity, or solidarity.**

The will of lawmakers is different, who in the reform introduced by Organic Law 2/1919 (sic), 1 March, considered it appropriate to introduce a new precept (Art. 382 bis) which punishes drivers who "...outside the cases contemplated in Article 195, voluntarily and without risk to himself or others, **leave the scene of the accident after causing an accident in which one or more persons are killed** or in which injury is caused which constitutes an offence under Article 152.2".

This creates a subsidiary offence which aims to avoid the impunity of conducts which escape the limits of the offence defined under Article 195 of the Criminal Code. Inspiration has been sought by mistakenly mirroring the wording of the German provisions, which punishes the "crime of fleeing" or "crime of escaping" as a response to the offender's "legal duty to wait" and "assistance".

This reference to "injury constituting an offence under Art. 152 Criminal Code referred to above eventually gave rise to Organic Law 11/2022, of 13 September, as there had been cases of acquittal for crimes of fleeing, given that the accused party had acknowledged that the facts were serious negligence in order to be convicted only for this offence and acquitted for the crime of fleeing, given that only death or injuries caused by less serious negligence were punishable, but not serious negligence, a gap addressed by the aforementioned Organic Law 11/2022 of 13 September to close this loophole and convict for the crime of fleeing both in case of death caused and any of the



imprudence, as the new criminal offence refers only to *causing any of the injuries referred to in Articles 147.1, 149 and 150*.

On the atypical nature of the facts of fleeing the scene of the accident when the victim had died before the introduction of Art. 382 bis of the Criminal Code in 2019, we have already ruled as part of the analysis of this ruling of the Supreme Court 284/2021, of 30 March<sup>8</sup> referred to above.

We pointed out that "the hit and run occurred before 3 March 2019, Art. 382 bis of the Criminal Code was not in force, and, therefore, if the above criteria in relation to the interpretation of situations in which the high likelihood that the injured party had died and the driver fled was applied, it would mean that "there was no assistance that could be given" and would lead to the non-application of Art. 195 or Art. 382 bis of the Criminal, as they were not in force when the circumstances occurred, i.e. before 3 March 2019.

As we have seen above, in the specific case subject to analysis in the aforementioned ruling, the Supreme Court overturned the conviction for attempted failure to give assistance in the face of proven facts, which included a case of a hit and run that occurred before 3 March 2019, and therefore, an attempt was not possible in these cases and neither is a conviction under Art. 195 Criminal Code, meaning that if Art. 382 bis Criminal Code was not in force, the act is atypical and, as a consequence, unpunishable.

Lest we forget, either, an issue that we have already highlighted and which may be of great interest, referring to the fact that with regard to the question of whether fleeing the scene of the accident can be justified by protection against self-incrimination, the aforementioned Opinion 1/2021 of the State Attorney General indicates that:

"In the case of intentional homicide, the abandonment of the site and fleeing in the presence of the agents is justified by the recognised protection against self-incrimination, among others, in Supreme Court Ruling 670/2007, of 17 July, and could also be justified in reckless crimes such as, by way of example, in the case of Art. 358 Criminal Code when the perpetrator is surprised and flees disobeying the orders of the agents. However, this is not the case for road traffic homicides and reckless injuries. The case of *People v. Rosenheimer* is well known in the USA, in which Rosenheimer rammed a car with three people in it, killing one, and fled the scene, before being identified and eventually charged. He appealed the Fifth Amendment, which required him to remain at the scene of the accident, arguing that it violated his right not to testify against himself. The ruling said "The use of these motor vehicles has created serious danger (...) to protect the victims and so that those causing such damage can be identified, it is the duty of the person causing the accident to remain and notify the police (...) certainly human decency would impose such an obligation and I cannot believe that a law imposing and enforcing this would be in breach of the US Constitution (...)"

---

<sup>8</sup> Inexistence of the to give assistance in the event of the death of the victim (Analysis of Supreme Court Ruling 284/2021, of 30 March) Vicente Magro Servet, Magistrate of the Supreme Court. Doctor of Traffic and Road Safety Law , No. 262, Doctrine Section, June 2021, Wolters Kluwer

With this in mind, it is hereby rejected that the actions in relation to which the criminal offence is based could obviously be covered by this conduct, although in the background, the perpetrator of the offence or the fortuitous collision may wish to avoid police and court proceedings by remaining at the scene of the accident and it being proven that the perpetrator was reckless, or to avoid, in the case of being unforeseeable, being linked to the circumstances, although he was not at fault, a circumstance that in many cases should be clarified in the corresponding trial and not taken for granted a priori, as there are traffic complaints involving negligence in which the accused party is acquitted because the event is understood to be unforeseeable or even the fault of the victim and not that of the driver. Fleeing the scene saves them from this dilemma; however, by doing so they commit a criminal act by transforming what might not be unlawful into fleeing the scene, which is ultimately unlawful.

Consequently, we have seen that imperfect forms of execution do not apply to the offences of Arts. 195 and 382 bis of the Criminal Code related to each other as conducts characterised by the human lack of solidarity of those who witness or participate in a traffic accident and their response is to flee, either by not helping when the accident is caused by a third party, or by leaving the scene when the cause is the very driver who is absent, evading their criminal, human and personal responsibilities, without in these cases imperfect forms of execution being possible.





## II.- RESEARCH WORKS





**Sergio García Palacín**  
Lieutenant Guardia Civil  
Head of the Torrelavega Traffic Unit  
Cantabria Traffic Department

**THE BREACH OF VEHICLE  
IMMOBILISATIONS ON INTERURBAN  
ROADS IN CANTABRIA**



## THE BREACH OF VEHICLE IMMOBILISATIONS ON INTERURBAN ROADS IN CANTABRIA

**Summary:** 1. INTRODUCTION 2. THE BREACH OF IMMOBILISATIONS. 2.1. Sanctions and penalties. 2.2. Statistical analysis of infringements committed on interurban roads in Cantabria (2018/2022). 3. IMMOBILISATION BY THE TRAFFIC UNIT. 3.1. Means used to immobilise vehicles. 4. INTERVIEWS AND SURVEY. Interviews with road safety authorities. Interviews with the heads of the police forces responsible for road safety. Survey of members of the Traffic Unit of the Guardia Civil in Cantabria. CONCLUSIONS AND PROPOSALS. BIBLIOGRAPHY

**Resumen:** Nuestro ordenamiento jurídico en materia de la seguridad vial y de la ordenación del transporte terrestre regula la medida provisional de la inmovilización de un vehículo aplicada por los agentes de la autoridad encargados de la vigilancia del tráfico y del transporte. El quebrantamiento de estas inmovilizaciones supone que en muchas ocasiones se genere un grave riesgo para la seguridad vial al permitir que se continúen cometiendo las infracciones que motivaron la aplicación de la medida, especialmente las relacionadas con el consumo de alcohol o drogas, por su relevancia en la producción de la siniestralidad vial con víctimas mortales. Con el propósito de evitar o minimizar estos quebrantamientos que se producen en las vías interurbanas de Cantabria, es necesario realizar un estudio que incida en la idoneidad de las actuales sanciones y penas asociadas, y en la práctica de las inmovilizaciones de vehículos que realizan los componentes de la Agrupación de Tráfico de la Guardia Civil, desde la perspectiva de la eficacia de sus medios para asegurar la medida provisional y de su regulación interna sobre el procedimiento operativo para aplicarla.

**Abstract:** Our legal system on road safety and land transport regulation regulates the provisional measure of the immobilization of a vehicle applied by the authority agents in charge of traffic and transport surveillance. The violation of these immobilizations means that in many cases a serious risk is generated for road safety by allowing the violations that motivated the application of the measure to continue being committed, especially those related to the consumption of alcohol or drugs, due to their relevance in the production of road accidents with fatalities. In order to avoid or minimize these violations that occur on the interurban roads of Cantabria, it is necessary to carry out a study that affects the suitability of the current sanctions and associated penalties, and the practice of vehicle immobilizations carried out by the components of the Traffic Group of the Civil Guard, from the perspective of the effectiveness of its means to ensure the provisional measure and its internal regulation on the operating procedure to apply it.

**Palabras clave:** Quebrantamiento, inmovilización, seguridad vial, transporte terrestre, siniestralidad vial.

**Keywords:** Breakdown, immobilization, road safety, land transportation, road accidents.

**ABBREVIATIONS**

ATGC - Traffic Unit of the Guardia Civil.

BOC - Official Gazette of the Civil Guard.

BOE - Official State Gazette.

COTA - Traffic Operations Centre.

CP - Criminal Code

DGT - Directorate General for Traffic.

H - Hypothesis.

LOTT - Law on the Organisation of Land Transport.

LSV - Road Safety Law.

PS - Derivative Question.

RDL - Royal Legislative Decree.

ROTT - Regulation of the Law on the Organisation of Land Transport.

SIGO - Operational Management System (Guardia Civil computer application).

## 1. INTRODUCTION

As part of the daily services provided by the members of the Traffic Unit of the Civil Guard (ATGC), it is common for a vehicle to be immobilised as a provisional or precautionary measure with a view to preventing specific administrative or criminal offences from being committed, to guarantee road safety and fair competition in the land transport sector or even to protect financial penalties applied to offending citizens who do not reside in Spain.

In Cantabria, agents belonging to the Traffic Unit of the Guardia Civil perform these immobilisations of vehicles on interurban roads and breaches of such measures often continue to seriously endanger road safety, leading in some cases to road accidents or reckless driving.

The media coverage of these breaches should also not be overlooked, especially when vehicles are immobilised for alcohol and drug offences and the perpetrators repeatedly commit the same offences, having skipped successive immobilisations.

These circumstances posed the question of whether the current sanctions and penalties reserved for breaches have a sufficient deterrent effect on potential offenders and, in turn, whether the role of enforcement officers in charge of monitoring traffic and road safety should be limited to applying the provisional measure of immobilisation in cases covered by the current legislation, or whether they should go further and try to ensure it in the best possible way to prevent breaches from occurring and the offences that gave rise to the immobilisation from continuing, especially when these offences pose a serious risk to road safety. As a result of these reflections, the idea came about of performing this undertaking as a tool aimed at preventing the breach of vehicle immobilisations on interurban roads in Cantabria, focussing the study on optimising the practice of immobilisations carried out by the ATGC and on the suitability of the sanctions and penalties applied to perpetrators, with a view to establishing the appropriate proposals for improvement, if necessary.

Having defined the problem, this STUDY will focus on the breaches of vehicle immobilisations on interurban roads in Cantabria over the past five years.

The performance of this research work is based on the following question:

- Can the breach of vehicle immobilisations on interurban roads in Cantabria be avoided or minimised by improving the practice of immobilisations carried out by the ATGC and by increasing the sanctions and penalties applied to perpetrators?

To help resolve this initial question, the following derivative questions arose and were resolved:

- Are there any procedures in the internal regulations of the ATGC for proceeding with vehicle immobilisations?
- Can the effectiveness of the means or mechanisms used by ATGC to immobilise vehicles be improved?



- Should the sanctions and penalties imposed on those responsible for breaches be increased?

In turn, these questions lead to the formulation of the following hypotheses to be addressed in the present study:

- “If there were an operational procedure at the ATGC for performing immobilisations, the number of breaches would be reduced”;
- “If the ATGC were to use more effective means or mechanisms to perform immobilisations, it would be possible to prevent breaches from occurring”;
- “Tougher sanctions and penalties for breaching immobilisations could reduce the risk of them materialising”.

As part of this trial, the study method used consists of the hypothetical-deductive method, in which, based on the analysis and interpretation of the phenomenon studied, we will try to validate or reject, where appropriate, the hypotheses initially put forward, following previously defined lines of research. A qualitative paradigm has also been used, based on the analysis of numerous documents related to the provisional measure of vehicle immobilisation, as well as interviews and surveys performed with people in positions and functions related to road safety.

## **2. THE BREACH OF IMMOBILISATIONS.**

After immobilising a vehicle, the traffic officer expressly orders the driver to refrain from driving it until the causes that led to the immobilisation cease to exist, and in the event of disregarding this order, the immobilisation will be breached. These cases of breaches are not punished in the same way, depending on whether road safety or road transport legislation, or even criminal law, applies to them.

Breaches of immobilisations allow the infringements that led to the immobilisation to continue, with the serious damage that this entails. To assess whether road accidents on interurban roads in Cantabria pose a problem for road safety and for the transport sector, a statistical analysis of the data recorded by the Traffic Unit of the Guardia Civil of Cantabria will be undertaken.

### **2.1. Sanctions and penalties.**

Breaching the immobilisation of a vehicle is considered as disobedience to the express order of an officer of the authority. This particular view can be attributed to the fact that when the officer immobilises a vehicle, they expressly warn the driver that they are not allowed to drive until the causes that led to the immobilisation cease to exist, which must also be verified by an officer prior to the lifting of the immobilisation. Failure to comply with this prohibition, without the express authorisation of an officer, would constitute a breach and, consequently, disobedience.

Initially, these breaches were prosecuted under criminal law, with the perpetrators being charged with an alleged misdemeanour for minor disobedience to a police officer, as defined in Article 634 of the Criminal Code (CP) and punishable by a fine of ten to sixty days. This led to numerous court appearances by traffic officers, which was detrimental to the service, as well as overloading the courts.

However, in 2015, two important legislative reforms took place that would overhaul the way in which the breach of immobilisations in the field of road safety were punished: on the one hand, through Organic Law 1/2015, of 30 March, which resulted in a profound reform of the Criminal Code resulting in many offences being decriminalised and others becoming minor offences; and on the other hand, the new Law on Public Safety (Organic Law 4/2015, of 30 March) came into force, which repealed and replaced the previous Law dating to 1992. Among the offences that ceased to be punishable under criminal law and that became administrative offences was minor disobedience to police officers, which was classified as a serious offence under the new Law on Citizen Safety (Article 36.6), punishable by a fine of 601 to 30,000 euros.

Effective this reform, breaches of immobilisations are now sanctioned as an administrative offences, initially processed by the Government Delegations or Subdelegations as offences of disobedience to officers in the exercise of their duties pursuant to the Law on Citizen Safety 4/2015. However, following the entry into force of Royal Legislative Decree (RDL) 6/2015, of 31 October, approving the consolidated text of the Law on Traffic, Circulation of Motor Vehicles and Road Safety, Article 76(j) on 31 January 2016, “not respecting the instructions and orders of the officers responsible for monitoring traffic” is now considered serious offence, whereas in the previous law, the LSV (the now repealed RDL 339/1990) only the action of not respecting the instructions of officers was an offence (Article 65.4(j), with no mentioning the orders of officers. With this new wording, disobedience to traffic officers was included in road safety legislation, making it possible to report the breach of the immobilisation of a vehicle as a serious infringement of Article 76(j), of the LSV, in relation to Article 143(1), of the General Traffic Regulations (RGC), punishable by a fine of 200 euros and the deduction of 4 points from the offender’s driving licence. In 2022, following the entry into force of Law 18/2021, of 20 December, which amended Article 76(j) of RDL 6/2015 of the LSV, changed its current wording as follows: “failure to respect the instructions or orders of the authority responsible for the regulation, organisation, management, monitoring and discipline of traffic, or of its agents”, which also includes disobedience in response to the orders of the competent traffic authority.

Following the introduction of this new offence of disobedience to the orders of traffic officers in the LSV, would it be possible to report the breach of an immobilisation related to road safety under the aforementioned Organic Law 4/2015 on the Protection of Public Safety? To answer this question, we must turn to the Public Safety Law itself, in particular, Article 31 thereof, which establishes the corresponding rules and procedures, stating in point 1 that “actions that may be classified according to two or more precepts of this or another Law shall be punished in line with the following rules” and in section a) that “The special provision shall be applied preferably to the general provision”, implying that if the specific offence is included in the traffic legislation, the specific provision must be applied first, with preference to other subsidiary legislation, as in this case would be the Public Safety Law. This legal criteria is also included in point 1 of the first additional provision of Law 39/2015, of 1 October, on the Common Administrative

Procedure of the Public Administrations, which regulates specificities by subject matter, establishing that “the administrative procedures regulated in special laws by subject matter that do not require any of the formalities provided for in this Law or regulate additional or different formalities shall be governed, with respect to these, by the provisions of said special laws”. To this end, the administrative reports corresponding to breaches of vehicle immobilisation performed in the administrative field of road safety must be considered as breaches of Article 76(j) of the LSV and will be referred to the corresponding Provincial Traffic Unit for the imposition of sanctions in matters of road safety.

In addition, since 2003, there has been a specific type of administrative offence for breaches of vehicle immobilisations related to the land transport regulations. Thus, Law 29/2003, which addresses the improvement of competition and safety conditions in the road transport market, partially amending Law 16/1987 on the Organisation of Land Transport (LOTT), defines for the first time, in Article 140.7, the specific offence of breaches, including “the breach of orders to immobilise or confiscate vehicles or premises” as a very serious offence. To date, this offence still exists in Article 140.12 of the LOTT and in Article 197.13 of the Regulation of the Law on the Organisation of Land Transport (ROTT), worded as a “breach of the order to immobilise a vehicle”, which is considered very serious and is punishable by a fine of 4001 to 6000 euros.

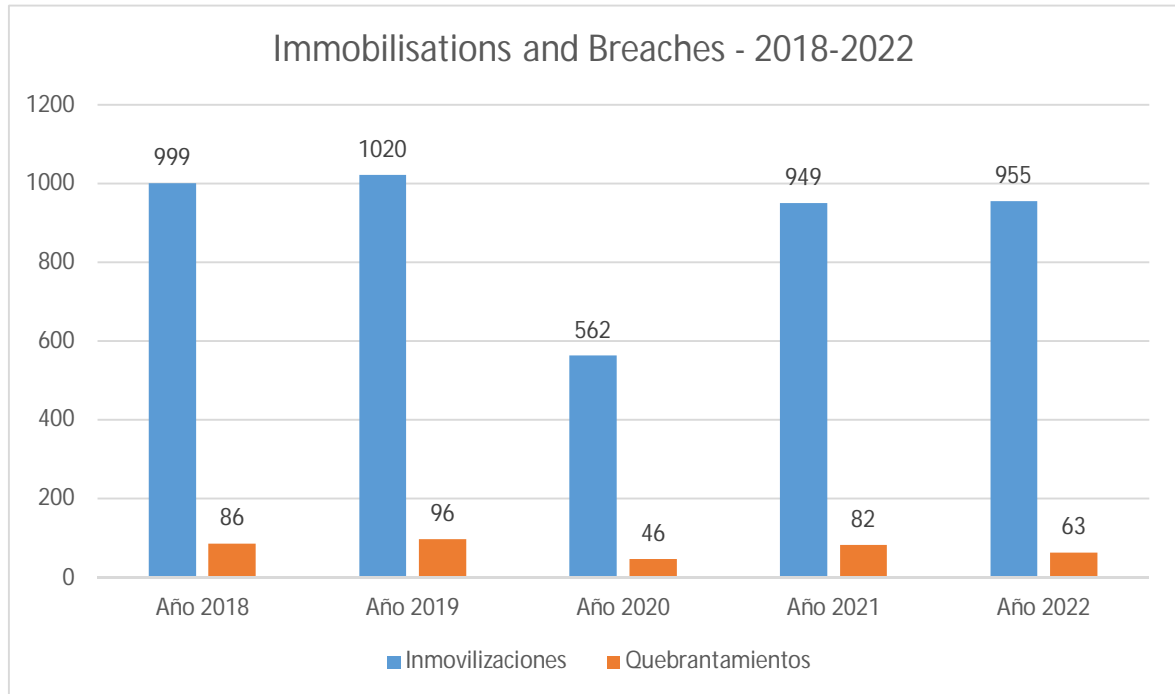
As explained above, the breach of immobilisations is addressed from two different perspectives: road safety and transport. This depends on whether the road safety or road transport legislation applies to the case in hand. The main difference lies in the classification of the offence, which is defined as very serious in transport legislation and only serious in road safety legislation. In the understanding of the author of this article, its consideration as a serious offence in the field of road safety does not seem very appropriate, as to immobilise a vehicle, offences must be committed that pose a serious danger to road safety, considered in most cases as very serious offences, and breaching the immobilisation means that the same offences can continue to be committed that would seriously compromise road safety, and yet they are punished as serious offences, punished in most cases with smaller fines than the initial offence that led to the immobilisation, meaning it is more beneficial for the offender to breach the immobilisation than comply with the immobilisation.

Finally, the question arises as to whether the decriminalisation of the misdemeanour of minor disobedience completely rules out criminal proceedings to punish the perpetrators of breaching immobilisations, or whether, on the contrary, in some cases they could be punished for committing the crime of serious disobedience to police officers, as defined in Article 556.1, of the current Criminal Code, punishable by a prison sentence of three months to one year or a fine of six to eighteen months. We will look to answer this question as we proceed in this article.

## 2.2. Statistical analysis of offences committed on interurban roads in Cantabria (from 2018 to 2022).

To perform a statistical analysis of the breaches of vehicle immobilisations carried out by the ATGC on interurban roads in Cantabria, data for the past 5 years (2018-2022) was requested from the Traffic Unit of the Guardia Civil in Cantabria.

The graph below shows the data contained in the immobilisation records<sup>1</sup> held by the Traffic Operations Centre (COTA) of the Traffic Unit of the Guardia Civil in Cantabria, containing all vehicle immobilisations related to the road safety and land transport legislation and their corresponding breaches.



*Graph 1: Total number of immobilisations/breaches on interurban roads in Cantabria (2018-2022)*

*Source: Traffic Unit of the Guardia Civil in Cantabria*

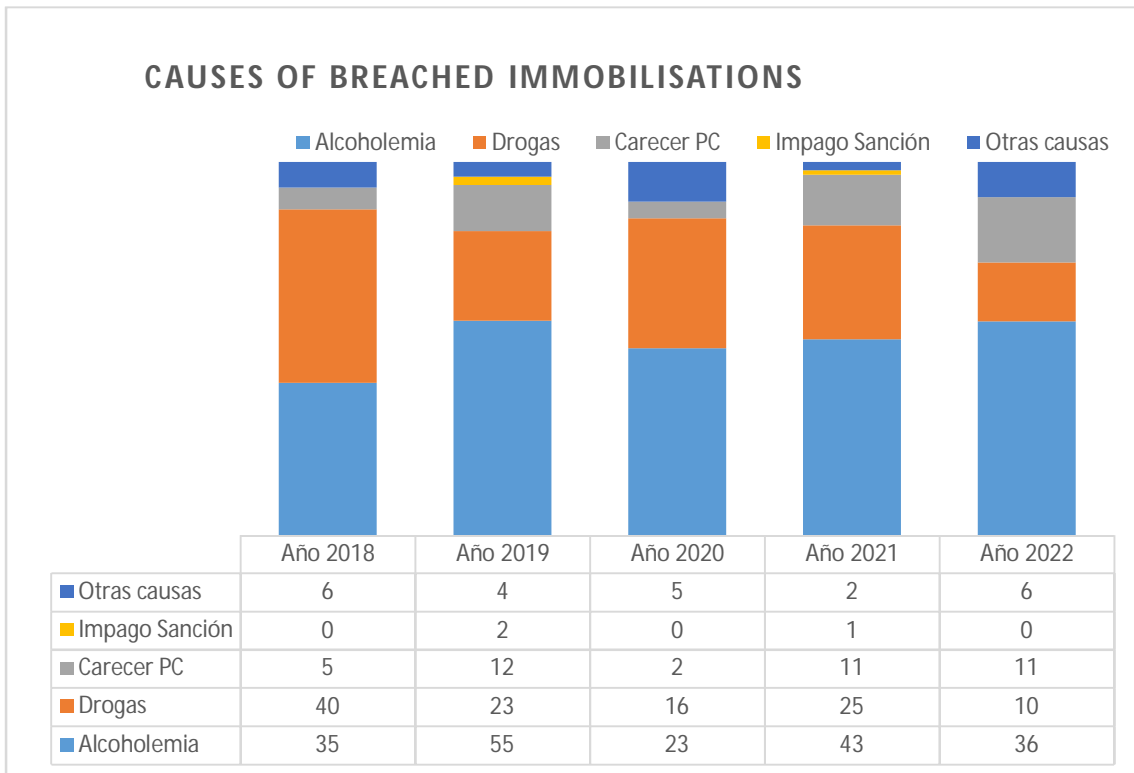
This graph shows the total number of vehicle immobilisations performed on interurban roads in Cantabria, compared to the total number of breaches of these immobilisations, over the past 5 years (from 2018 to 2022), broken down by year, as follows:

- In 2018, there were a total of 999 immobilisations, 86 of which were breached, representing 8.6% of the total.
- In 2019, a total of 1020 vehicles were immobilised, 96 of which were breached, representing 9.4% of the total. During 2020, mobility restrictions were imposed to control the spread of the pandemic, reducing the number of immobilisations to a total of 562, of which 46 were breached, representing a percentage of 8.1%.
- During 2021, the post-pandemic period, the numbers of immobilisations increased to pre-pandemic levels, totalling 949, with 82 breaches, or 9.6% of the total.
- Finally, during year 2022, a total of 955 vehicles were immobilised, resulting in 63 breaches, representing 6.5% of the total.

<sup>1</sup>Records that the COTAs must contain, according to the Rules of the Traffic Unit of the Civil Guard, Title 2 Appointment of the service, section 42.9.

During the five years covered by this study, the annual percentage of drug offences ranged between 8 and 9%, except for 2022, when it fell to 6.5%, perhaps because fewer drug tests were carried out due to a reduction in the supply of drug testing kits.

Although the rate of breaches is not alarming, they remain too high and should be reduced because of the danger they pose to road safety.



*Graph 2: Total No. of main causes of breached immobilisations (2018-2022)*

*Source: Traffic Unit of the Guardia Civil in Cantabria*

This reflects the main causes of immobilisations breached during the years subject to study, 2018 to 2022, with the majority resulting from alcohol and drug offences and lack of a driving licence, with the number of non-payment of fines being almost negligible. As regards breaches of immobilisations resulting from infringements of transport regulations, these are included under “other causes”, together with other infringements including missing MOTs and serious defects in the vehicle. The number of such infringements is low.

The results obtained show that the most frequent breaches can be traced to the immobilisation of vehicles whose drivers were detained for alcohol and drug offences, which in turn are the main reasons why traffic officers immobilise vehicles. These breaches are particularly dangerous for road safety because of the possibility that the perpetrator may continue to drive while over the limit or having consumed drugs, this being a particularly relevant factor in the production of road accidents.

In 2021, 49.4% of drivers killed in road crashes were driving under the influence of alcohol, drugs or psychotropic drugs, and 75% of drivers who returned a positive

breathalyser test had a very high blood alcohol level, of 1.2 grams/litre or more. (Pilar Llop, Ministra de Justicia, 2022) This data shows the seriousness of the problem.

### 3. IMMOBILISATION BY THE TRAFFIC UNIT.

In terms of internal regulations, the ATGC has its “Unit Rules”, which consist of a compendium of rules and procedures that regulate any aspect related to the service of the Civil Guards working at the Traffic Unit, in the different categories of motorists and accident investigations, and their missions of surveillance, regulation, assistance and control of traffic and transport, investigation as court-appointed traffic police, protection at sporting events, as well as in relation to dealing with citizens.

Immobilisation is regulated in these regulations, set out in a dispersed manner in Title 6 relating to the “Procedure for controlling alcohol and drug consumption in relation to road safety” (specifying the specific way of immobilising vehicles in cases of alcohol and drug consumption, and the way of proceeding in case of breaches) and in Title 6 relating to the “Procedure for the control and monitoring of traffic, the circulation of motor vehicles and road transport” (establishing a brief procedure for immobilising vehicles covered by the cases included in the previously repealed Road Safety Law, a series of measures to be adopted in such cases, the way of lifting an immobilisation and breach thereof, and describing vehicle immobilisations in relation to transport by road, establishing action guidelines to perform immobilisations). However, it does not include the different cases applicable to the immobilisation of vehicles related to road safety and land transportation, nor does it resolve a number of the operational problems that arise when immobilisations are carried out, including but not limited to those caused when lifting immobilisations performed by a different patrol and the use of immobilisers that have different keys or the way to proceed in the event of breaches in which the immobiliser is damaged or disappears.

It is therefore considered necessary to create an operating procedure for immobilising vehicles in a standardised way, covering all possible cases, whether under the road safety or road transport regulations, and that is updated and establishes common guidelines for action to ensure the effectiveness of the immobilisation and help to prevent breaches from occurring.

#### 3.1. Means used to immobilise vehicles.

To secure immobilisations and to prevent breaches, the use of immobilisers which prevent the vehicle from being driven is essential. At present, the following types of immobilisers are available to the ATGC:

- “Spigot” type motorbike immobiliser, to be fitted to one of the wheels. Given their size and flexibility, they can be placed on four-wheeled vehicles and motorbikes.





*Image no. 1: Immobiliser for motorbikes.  
Source: Prepared internally.*

- “Clamp” type vehicle immobiliser, fitted to the steering wheel and one of the pedals. Given their size and flexibility, they can be placed on four-wheeled vehicles and motorbikes.



*Image no. 2: Steering wheel-pedal clamp immobiliser.  
Source: Prepared internally.*

- “Clamp” type immobiliser for vehicles, fitted to large wheels. This type of immobiliser was provided by the Directorate General for Transport and Communications in Cantabria for use by officers of the Traffic Unit in Cantabria with specific road transport monitoring duties. Given its size, it can only be placed on four-wheeled vehicles and is suitable for immobilising large vehicles, such as lorries and buses.





*Image no. 3: Large wheel clamp immobiliser.  
Source: Prepared internally.*

The first two immobilisers offer the major advantage of being transportable on a motorbike, which facilitates the practice of immobilisations when the service is performed on this vehicle, since to secure such a device, there is no need for another four-wheeled patrol car carrying an immobiliser. When performing such services using a motorbike, there is less and less space in the side cases to carry all the necessary equipment, including the immobiliser. It would therefore be advisable to find the right place in the side case for the “steering wheel-pedal” type immobiliser, which is the most commonly used as it can be fitted to most vehicles, it takes up less space and is also well secured, preventing it from falling out and getting lost each time the case is opened.



*Image no. 4: Proposal for securing the immobiliser inside the side case of a motorbike.  
Source: Prepared internally.*

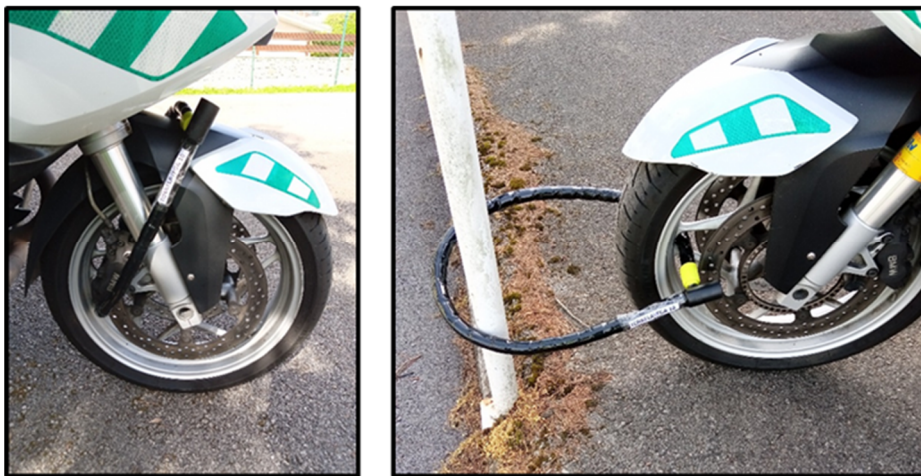
From an operating perspective, the main drawback of these immobilisers is that each one uses a different key. This may seem like an unimportant detail, but when it comes to optimising human resources for the provision of the service, this becomes a major problem. This is on account of the fact that, to lift the immobilisation of a vehicle, only the patrol with the key for the immobiliser used can do so, although another may be available closer by. In the event of not being able to lift the immobilisation during their

shift, they have to hand the key to the patrol that takes over from them, complicating the situation further if it is not from the same unit and a large number of immobilisations have been performed. This is in addition to the risk of the keys being lost, meaning that sometimes they have to be passed through several patrols until the vehicle's immobilisation is lifted. A universal key for all immobilisers would, in most cases, improve the response time for lifting immobilisations, as it could be performed by the nearest available patrol to the location of the immobilised vehicle, and solve the problem of locating the patrol that has the key for each immobiliser used to lift immobilisations.

The effectiveness of immobilisation depends to a large extent on the fitting of an immobiliser to prevent the vehicle from being driven. These immobilisers available to the ATGC have to be placed correctly and effectively in order for the device to be secured. Although they may seem easy to install, without the need for training, it is likely that the first time they are used, they will not be fitted correctly, especially in relation to the second and third devices mentioned above, making it easier to break them.

Based on the professional experience of the signatory, the installation features for each type of immobiliser are outlined below:

- The “*spigot*” type immobiliser: this is the easiest to install on motorbikes, as it can simply be placed on one of the motorbike's wheels and, if it has a fixed point, attach it here as well, to secure it more effectively.



*Image no. 5 and 6: Fitting of the “spigot” type immobiliser to the front wheel of a motorbike.*

*Source: Prepared internally.*

- The “*steering wheel-pedal clamp*” type immobiliser: this is the most commonly used immobiliser as it can be fitted to most vehicles. The problem of installation arises when the clamp is not long enough to engage both the pedal and the steering wheel, or because the width of the vehicle's steering wheel means it cannot be fitted, or if it can, it is too tight and can damage the material with which the steering wheel is lined.



*Image no. 7: Fitting the “steering wheel-pedal clamp” type immobiliser to a vehicle.  
Source: Prepared internally.*

- The “large wheel clamp” type immobiliser: is used to immobilise large vehicles such as lorries and buses. Due to its size and weight, having two people fit this trap is recommended.



*Image no. 8: Fitting the wheel clamp immobiliser on a lorry.  
Source: Prepared internally.*

It is for these reasons that it is considered that the means available to the ATGC to ensure immobilisations are adequate, although it would be advisable to have another type of immobiliser to make up for cases in which it is not possible to install the “steering wheel-pedal clamp” type immobiliser or it is not possible to access the inside of the vehicle for its installation, and in turn, to establish rules explaining how the different types of immobilisers allocated to the Units are installed, so that any Civil Guard officer who

has to use them to immobilise a vehicle can do so with no doubts about the correct and effective way of installing them.

#### 4.- INTERVIEWS AND SURVEY.

With a view to providing further details of the possible problems and specific features related to the matter in question, several interviews have been carried out with different authorities and heads of police forces related to road safety, as well as with members of the Traffic Unit of the Guardia Civil in Cantabria, whose contributions will help to further clarify the different situations initially raised.

Extracts from interviews conducted with different road safety authorities:

On 17 March 2023, the Provincial Head of Traffic in Cantabria, Mr. José Miguel Tolosa Polo, was interviewed, as a result of which, the following conclusions could be reached:

- The cases set out in Article 104 of the LSV require, given their immediacy, seriousness and search for a reduction in the risks associated with road safety, a guarantee that ensures the effectiveness of each action, thus avoiding the damage that the alleged breaches could cause.
- Technical advances in the mechanisms for performing immobilisations should allow us to have more robust and efficient tools to ensure the effectiveness of the measures. It is also important to have a sufficient number of devices that can be used at different events (popular festivals, music festivals, different agglomerations, etc.) where the number of immobilisations to be performed could presumably be high.
- Given the risk to road safety that breaching the immobilisation generates, a different classification of this type of conduct in the legislation on Traffic and Road Safety is appropriate, and a higher financial penalty seems logical to dissuade possible offenders from engaging in such conduct. As regards the penalty of removing points from a driver's licence, we could consider that as this conduct is not always attributable to the driver and which clearly disregards the orders of the Authority and its agents, only a financial penalty is applicable (with an increase in the corresponding financial sum), but without deducting points.

On 20 March 2023, the Road Safety Prosecutor in Cantabria, Mr. Jesús Dacio Arteaga, was interviewed and the main takeaways from the interview have been summarised below:

- The offence of serious disobedience in Article 556.1 of the CP is very difficult to apply in cases in which the immobilisation of vehicles is breached, on account of the requirements currently demanded by case law, both in terms of its application and its criminalisation. Although the possibility of applying the offence of disobedience to law enforcement officers for breaches of the immobilisation of vehicles has not been ruled out, in reality or in terms of its practical application, it should be based on the specific case and circumstances, with its use being very restricted.



- In cases where the immobiliser is damaged or the immobiliser is removed from its place, it is considered that the offences of theft or damage can be resorted to in criminal law. Probably a misdemeanour, either under Article 234.2 or Article 263.2, although the value of the immobilisers is unknown, he believed that they would not be more than €400.

The applicability of the offence of theft or damage will always depend on the intention of the perpetrator. In these cases, we generally assume that the intention is to breach the immobilisation, as direct intent in the first degree. Secondly, their intent is to cause damage, which is what the perpetrator inevitably does (direct intent in the second degree) and the theft of the device seems very secondary; he does not consider malice or profit in the motive, although residually, the offence of theft could be applied under the doctrine of eventual malice.

Interviews with the heads of police forces responsible for road safety.

On 20 February 2023, the Chief Commissioner of the Road Safety Division at the Navarre Regional Police, Mr. José Antonio Gurrea Martínez, was interviewed and the most important aspects of this interview are outlined below:

- For vehicle immobilisations, "*steering wheel-dashboard*" type immobilisers are available, and for vehicles that cannot be accessed from inside, "*wheel clamp*" type immobilisers are available, all with a universal key for each type of clamp.
- In relation to the statistics regarding the breach of immobilisations, in 2022, a total of 2,026 vehicles were immobilised in the province of Navarre, 12 of which were breached, representing 0.59% of the total.
- In the event of a breach of an immobilisation that involves moving the vehicle with the clamp still attached to it, which will almost certainly be destroyed or damaged in the process, the perpetrator will be investigated for an alleged offence of damage, in addition to the corresponding administrative complaint being filed for the breach of the immobilisation.
- The Regional Police of Navarre has a standardised working procedure for the immobilisation of vehicles, which indicates the procedure to follow in this case. setting out the procedure to be followed in this case, the unit to be informed of the immobilisation and its subsequent lifting, where to carry it out, which form to fill in, etc.

On 28 February, the Deputy Chief Inspector of the Local Police of Torrelavega (Cantabria), Mr. Enrique Sáez Trigueros, was interviewed. Worth particular note was the following:

- Vehicles are immobilised on the spot if the vehicle is parked properly, and if not, they are towed to the municipal vehicle depot.
- As regards the statistics on breaches of immobilisations, in 2022, a total of 405 vehicles were immobilised, with 7 of these immobilisations being breached,

which represents 1.72% of the total. This means that the usual procedure of transferring vehicles to the municipal depot is the most effective.

- An operational protocol is in place to carry out immobilisations and subsequently lift them.

On 22 February 2023, the Chief Major of the Traffic and Road Safety Division of the Guarda Nacional Republicana de Portugal was interviewed. The most significant points of this interview are summarised below:

- For vehicle immobilisations only *wheel clamp* immobilisers are available for passenger vehicles and vans.
- Although there are no statistics available on the number of breaches of immobilisations produced; on urban roads "*wheel-lock*" immobilisers are very effective (as these devices are difficult to remove). In all other cases, the immobilisations are notified in writing, and drivers usually respect the immobilisation for fear of committing an alleged offence of disobedience if they breach the immobilisation.
- There is an internal rule in place that regulates how vehicle immobilisations are to be performed.

#### Survey carried out with members of the Traffic Sector of the Civil Guard in Cantabria.

On 3 March 2023, an anonymous survey was carried out online amongst members of the Traffic Unit of the Civil Guard in Cantabria, belonging to the Traffic Details of Torrelavega, Laredo, San Vicente and Reinosa. In total, 35 responses were received.

The following conclusions can be drawn from the survey:

- All respondents consider that effective vehicle immobilisation is very important for road safety.
- The first time they immobilised a vehicle, almost half of them (45.7%) did not know how to install the immobiliser correctly and effectively.
- 71.4% responded that they lacked adequate training to effectively fit the different types of immobilisers available to the ATGC.
- Concerning the problems encountered by those surveyed when lifting the immobilisation of a vehicle using an immobiliser at their Unit, 20% of them claim to have difficulties because there is no single protocol for liaising among the members of the Unit that a vehicle has been immobilised, due to the problems attributable to having different keys for each immobiliser, which means that on numerous occasions they do not know who has the key and it takes time for it to be found. This represents a handicap for the use of this measure, and because they do not have practical training with the immobiliser for large vehicles. In addition, when the immobiliser used is from another unit, the percentage of respondents who experienced problems removing the immobiliser increased to 48.6%, mainly citing difficulties in locating the key

belonging to another unit, especially when the other unit's patrol has finished its service.

- Almost all respondents consider it necessary to develop a specific procedure regulating the practice of immobilisations and subsequently lifting them.
- The majority believe that there would be fewer offenders if the administrative penalty for breaking an immobilisation were increased.
- In response to the free text question asking for suggestions about how to improve the practice of vehicle immobilisations to prevent breaches, almost all responses suggested providing adequate training in the installation of immobilisers, having a universal key for opening all immobilisers, at least at a Sector level, increasing the number of immobilisers available, using other immobilisers that avoid having to access the passenger compartment of the vehicle (including wheel clamps), using other more effective mechanisms such as the confiscation of the immobilised vehicle by crane to a depot until the reasons for the breach no longer exist and increasing the penalty for breaches that do occur.

## CONCLUSIONS AND PROPOSALS

The breach of vehicle immobilisations allows the continuation of certain specified offences that gave rise to the application of the provisional measure for immobilising a vehicle, with the serious problem that this may entail in case of the persistence of the risk to the legal right that the different applicable legislations relating to road safety and land transport management, or even criminal law, were intended to protect.

This research aims to analyse the breaches of vehicle immobilisations on interurban roads in Cantabria over the past 5 years (from 2018 to 2022), with a view to defining the problem and being able to answer the initial question: Can breaches of vehicle immobilisations on interurban roads in Cantabria be avoided or minimised by improving the practice of immobilisations undertaken by the ATGC and by increasing the sanctions and penalties applied to the perpetrators? It emerged that once improvement could be based around the optimisation of vehicle immobilisation practices at an operational and police level, as well as an adaptation of the sanctions and penalties associated with breaches to deter potential offenders.

Looking deeper into the problems caused by the application of immobilisations on interurban roads in Cantabria, a statistical analysis of the immobilisations of vehicles carried out by the Traffic Unit of the Civil Guard on these roads and their subsequent breaches was carried out, focussing the study on the past 5 years (from 2018 to 2022). In view of the results obtained, it could be concluded that there was a considerable number of breaches, the annual percentage standing at between 8 and 9 % of the immobilisations carried out, except in 2022, when this percentage dropped to 6.5 %, possibly due to the fact that fewer drug tests were carried out than previously. As regards the causes of immobilisations, it was found that the number of breaches related to land transport regulations was insignificant in comparison to those related to road safety, with the majority being breached related to alcohol and drug consumption, which in turn are among the most dangerous offences for road safety due to their significant weight in the production of fatal road accidents.



At this point, it is worth looking at the other questions posed at the start of this study:

- Are there any procedures in the internal regulations of the ATGC for performing vehicle immobilisations?

Although the ATGC has several procedures in place in its internal regulations to deal with vehicle immobilisations, there is a clear need to create a single operational procedure for the immobilisation of vehicles which is up to date and covers the cases established in relation to road safety and land transport, with the respective exceptions, and which establishes common operational guidelines for carrying out immobilisations and subsequently lifting them, as well as in cases of breaches. This necessity is reaffirmed by the survey performed among the members of the Traffic Unit of the Guardia Civil in Cantabria, as part of which 80% of those surveyed considered it necessary to establish, at an operational level, a specific procedure for regulating the practice of immobilisations and subsequently lifting them. In addition, all the heads of the police forces responsible for road safety who were interviewed responded that they had an operational procedure, protocol or internal rule in place for the immobilisation of vehicles as part of law enforcement.

- Can the effectiveness of the means or mechanisms used by ATGC to immobilise vehicles be improved?

The immobilisers available to the ATGC are of three types, a “*spigot*” type clamp for immobilising motorbikes, a “*steering wheel-pedal clamp*” type which can be used on most vehicles, and a “*large wheel clamp*” type for immobilising large vehicles such as lorries and buses. Although these immobilisers provide a number of advantages and disadvantages from an operational perspective, they are considered in themselves to be of an acceptable effectiveness in securing vehicle immobilisations. The problem is that most vehicles can only be immobilised using the “*steering wheel-pedal clamp*” type immobiliser and there is no other type of immobiliser available which covers other forms of installation and can compensate its shortcomings. It is also necessary to establish rules that explain the correct and effective way of placing the different types of immobilisers to the officers, since based on the results of the survey performed amongst the Civil Guards belonging to the Traffic Unit in Cantabria, almost half of them did not know how to install the immobiliser correctly and effectively the first time they immobilised a vehicle, and 71.4% stated that they did not have adequate training to install the different types of immobilisers used by the ATGC.

- Should the sanctions and penalties to be imposed on those responsible for breaches be increased?

Breaches of vehicle immobilisations are considered offences of disobedience to law enforcement officers and their punishment will depend on the legislation applied. In criminal law, breaches can only be punished as a form of serious disobedience of agents of the authority, as reflected in Article 556.1 of the Criminal Code and punishable by a prison sentence of 3 months to 1 year or a fine of 6 to 8 months. Based on the interview with the Road Safety Prosecutor in Cantabria, its application should be very limited, applied to specific cases and particularly serious circumstances, since in accordance with the general criminal principle of minimum intervention,

administrative sanctions should be applied first, leaving criminal action as a last resort.

Under land transport legislation, breaching an immobilisation order is classified as a specific offence (Article 140.12 of the LOTT and Article 197.13 of the ROTT), considered as a very serious offence and punishable by a fine of between 4,001 to 6,000 euros. The infraction and sanction are considered appropriate, both in its classification as very serious and the value of the fine, as it is assumed that to serve a preventive purpose, it must be classified as at least the most serious infringement that it is intended to prevent from being committed with the application of the immobilisation measure, in such a way that a breach of the immobilisation cannot be more advantageous.

On the other hand, in road safety matters, the offence of breaching a vehicle immobilisation is not a specific offence, rather it is included in the range of conducts considered as an offence for not respecting the instructions or orders of law enforcement officers, classified as a serious offence (Article 76.j, of the LSV) and punishable by a fine of 200 euros and the deduction of 4 points from the perpetrator's driving licence. This classification as a serious offence does not seem to be proportionate to the serious damage caused to road safety on account of the fact that a very serious offence, such as those related to alcohol and drug consumption, can still be committed, nor does the sanction have a deterrent effect on the potential offender, because the payment of a fine of €100 (applying the discount) is probably more preferable than the damage caused by not being able to use the vehicle. Likewise, this stance is in line with the comments made by the Provincial Chief of Traffic in Cantabria in his interview, who indicated that given the significance of breaching the immobilisation order in relation to road safety, a different classification of this conduct in the LSV would seem appropriate, as well as a higher financial penalty to dissuade hypothetical offenders, without resulting in the deduction of points, since this conduct will not always be the responsibility of the driver and represents clear disobedience of the authority and its agents.

On the basis of these conclusions, below we verify whether the hypotheses set out at the start of this text are valid:

- “If there were an operational procedure in the ATGC for carrying out immobilisations, would the number of breaches be reduced?”  
In the response to this question, it has been found that there is a need to create an operating procedure for action in relation to vehicle immobilisations that clarifies how ATGC agents should proceed and resolve their difficulties to ensure the highest level of effectiveness of the measure and prevent breaches from occurring. The hypothesis was therefore validated.
- “If the ATGC were to use more effective means or mechanisms to carry out immobilisations, would it be possible to prevent breaches?”  
The answer to this question shows that the means available to the ATGC to perform vehicle immobilisations are effective, although on account of the fact that there is only one type of immobiliser used to carry out the majority of immobilisations, it would be necessary to provide a different immobiliser model to make up for installation shortcomings, meaning that no immobilisation is left unsecured through

the use of immobilisers and these means should also be accompanied by rules explaining their installation to further guarantee their effectiveness. Therefore, this hypothesis can only be partially validated.

- “If sanctions and penalties for breaching immobilisations were tougher, could the risk of them materialising be reduced?”

In response to this, it can be concluded that it would be necessary to establish a specific offence for breaches of vehicle immobilisations carried out to ensure road safety, classifying them in the LSV as a very serious offence with a higher financial sanction with a view to having a greater preventive effect. However, in criminal and transport matters, penalties and sanctions are considered sufficient and would not need to be strengthened. Consequently, this hypothesis can only be partially validated.

Finally, and with a view to answering the initial question, it can be concluded that if the practice of immobilisations carried out by the ATGC were improved by implementing an operational procedure for immobilising vehicles and the provision of sufficient and efficient immobilisers, with their rules of use, to guarantee the effectiveness of the measure, and a reform of the LSV were undertaken to establish the specific offence of breaching the immobilisation order, classified as a very serious offence and punishable with a higher fine, it would be possible to avoid or minimise the breach of vehicle immobilisations.

Based on the results of the study, the following proposals for improvement have been put forward:

1. Propose that the DGT establish a specific offence for “breaking the order to immobilise a vehicle issued by traffic enforcement officers”, classified as a very serious offence and punishable by a fine of 1,000 euros, without deduction of any points.
2. Include an operational procedure in the Traffic Manual for action in relation to vehicle immobilisations and a technical standard on the correct and effective installation of vehicle immobilisers, pursuant to the provisions of Article 4 of General Order No. 30/2021 of 9 September, which regulates Traffic and the structure, organisation and functions of the ATGC (Dirección General de la Guardia Civil, 2021).
3. In the technical specifications for new motorbike procurement contracts, include the installation of a fastening for “steering wheel-pedal clamps”, which is the most commonly used, inside the side cases, in such a way that it is placed in the lower recess at the bottom of the case, thus optimising space inside the cases and ensuring that the immobiliser is properly secured and does not fall out every time the case is opened.
4. Provide a larger number of immobilisers so that all four-wheeled vehicles and motorbikes are equipped with at least one immobiliser, and a minimum of two other incident immobilisers are stored at the Unit to enhance the vehicle module used when it is expected that a high number of immobilisations may occur.
5. Acquire immobilisers with a universal key to improve the operability of the patrols that carry out the immobilisations and subsequently lift them.

6. Supply another type of immobiliser to make up for the installation shortcomings of the “steering wheel-pedal clamp” type immobiliser, as this is the only immobiliser available to immobilise most vehicles, with the exception of motorbikes and large vehicles, such as wheel clamp type immobilisers for passenger cars and vans (this would avoid having to enter the passenger compartment of the vehicle to be immobilised) or dashboard steering wheel clamp type immobilisers (does not require any adjustment to the clamp length). As a proposal for future research, work could be performed to develop computer software that can be downloaded to the control unit of the vehicle to be immobilised via USB connection, preventing the vehicle from being started and subsequently allowing the immobilisation to be lifted.
7. Establish operational training on vehicle immobilisations and a practical explanation on the correct and effective installation of the different types of immobilisers in the training action performed by the Units.
8. Coordinate other more effective mechanisms with the DGT to supplement the means used by the ATGC to guarantee the maximum effectiveness of immobilisations in cases in which a possible breach seriously compromises road safety, especially involving drivers who are repeat offenders, such as having a towing service to transfer the immobilised vehicle to its base or to authorised municipal depots until the causes of the immobilisation no longer exist, with the offender paying the costs.
9. Register offenders who breach vehicle immobilisations in the Guardia Civil's “SIGO-Sistema Integrado de Gestión Operativa” database, in such a way that this information can be consulted by the patrols on duty and they can adopt the appropriate preventive measures for monitoring and securing the immobilisation, helping to avoid another possible breach.

## BIBLIOGRAPHY

- Agrupación de Tráfico de la Guardia Civil. (Normativa interna). Normas de la Agrupación. *Título 2 Nombramiento del servico, Título 11 Proc. de control de la alcoholemia y el consumo de otras drogas en la seguridad vial, Título 6 Proc. de control y vigilancia del tráfico, la circulación de vehículos a motor y el transporte por carretera.*
- Baños, A. (03 de febrero de 2022). *tutorica.com*. Obtenido de <https://tutorica.com/blog/blog-legislacion/inmovilizacion-del-vehiculo-por-carecer-de-seguro/>
- DGT. (6 de agosto de 2010). Escrito de respuesta a consulta de la Agrupación de Tráfico de la Guardia Civil sobre inmovilizaciones vehículos en carretera. Fuente: Escuela de Tráfico de la Guardia Civil.
- DGT Instrucción 14/V-106, 14/S-133, 14/C-114. (8 de mayo de 2014). *PoliciaLocalaragon.com*. Obtenido de [http://www.policiaLocalaragon.com/legislacion/trafico/instrucciones/dgt\\_instruccion\\_14-v-106\\_14-s-133\\_14-c-114\\_ley\\_6-2014\\_08-05-2014-.pdf](http://www.policiaLocalaragon.com/legislacion/trafico/instrucciones/dgt_instruccion_14-v-106_14-s-133_14-c-114_ley_6-2014_08-05-2014-.pdf)
- Dirección General de la Guardia Civil. (14 de septiembre de 2021). Orden General número 30/2021 de 9 de septiembre, por la que se regula la especialidad de Tráfico y la estructura, organización y funciones de la Agrupación de Tráfico de la Guardia Civil. España: BOC núm. 38. .
- Dirección General de Transporte Terrestre. (4 de septiembre de 2009). Escrito de respuesta a consulta de la Agrupación de Tráfico de la Guardia Civil sobre inmovilizaciones vehículos extranjeros. Fuente: Escuela de Tráfico de la Guardia Civil.
- Fiscal de Sala Coordinador de Seguridad Vial. (02 de marzo de 2020). *Ministerio Fiscal*. Obtenido de [https://www.fiscal.es/search?p\\_p\\_id=com\\_liferay\\_portal\\_search\\_web\\_search\\_results\\_portlet\\_SearchResultsPortlet&p\\_p\\_lifecycle=0&p\\_p\\_state=maximized&p\\_p\\_mode=view&\\_com\\_liferay\\_portal\\_search\\_web\\_search\\_results\\_portlet\\_SearchResultsPortlet\\_mvcPath=%2Fview\\_cont](https://www.fiscal.es/search?p_p_id=com_liferay_portal_search_web_search_results_portlet_SearchResultsPortlet&p_p_lifecycle=0&p_p_state=maximized&p_p_mode=view&_com_liferay_portal_search_web_search_results_portlet_SearchResultsPortlet_mvcPath=%2Fview_cont)
- Jefatura del Estado. (31 de julio de 1987). Ley 16/1987, de 30 de julio, de ordenación de los transportes terrestres. España: BOE número 182.
- Jefatura del Estado. (24 de noviembre de 1995). Ley Orgánica 10/1995, del Código Penal. España: BOE núm. 281. Obtenido de <https://www.boe.es/eli/es/lo/1995/11/23/10/con>
- Jefatura del Estado. (9 de octubre de 2003). Ley 29/2003, de 8 de octubre, sobre mejora de las condiciones de competencia y seguridad en el mercado de transporte por carretera, por la que se modifica, parcialmente, la Ley 16/1987, de 30 de julio, de Ordenación de los Transportes Terrestres. España: BOE núm. 242.

- Jefatura del Estado. (5 de julio de 2013). Ley 9/2013, de 4 de julio, por la que se modifica la Ley 16/1987, de 30 de julio, de Ordenación de los Transportes Terrestres y la Ley 21/2003, de 7 de julio, de Seguridad Aérea. España: BOE núm. 160.
- Jefatura del Estado. (2 de octubre de 2015). Ley 39/2015, de 1 de octubre, del Procedimiento Administrativo Común de las Administraciones Públicas. España: BOE núm. 236.
- Jefatura del Estado. (31 de marzo de 2015). Ley Orgánica 1/2015, de 30 de marzo, por la que se modifica la Ley Orgánica 10/1995, de 23 de noviembre, del Código Penal. España: BOE núm. 77.
- Jefatura del Estado. (31 de marzo de 2015). Ley Orgánica 4/2015, de 30 de marzo, de protección de la seguridad ciudadana. España: BOE núm. 77.
- Mínguez, J. (11 de abril de 2018). *Lawyerpress.com*. Obtenido de <https://www.lawyerpress.com/2018/04/11/el-decomiso-del-vehiculo-en-los-delitos-contra-la-seguridad-vial/>
- Ministerio de la Presidencia. (21 de noviembre de 2003). Real Decreto 1428/2003, Reglamento General de Circulación. España: BOE núm. 306 .
- Ministerio de la Presidencia. (05 de Noviembre de 2004). Real Decreto Legislativo 8/2004, de 29 de octubre, por el que se aprueba el texto refundido de la Ley sobre responsabilidad civil y seguro en la circulación de vehículos a motor. España: BOE núm. 267.
- Ministerio de Transportes, Turismo y Comunicaciones. (8 de octubre de 1990). Real Decreto 1211/1990, de 28 de septiembre, por el que se aprueba el Reglamento de la Ley de Ordenación de los Transportes Terrestres. España: BOE número 241.
- Ministerio del Interior. (31 de Octubre de 2015). Real Decreto Legislativo 6/2015, de 30 de octubre, por el que se aprueba el texto refundido de la Ley sobre Tráfico, Circulación de Vehículos a Motor y Seguridad Vial. España: BOE número 261, páginas 103167 a 103231.
- Pilar Llop, Ministra de Justicia. (20 de julio de 2022). *Lamoncloa.gob.es*. Obtenido de <https://www.lamoncloa.gob.es/serviciosdeprensa/notasprensa/justicia/Paginas/2022/200722-informe-toxicologico-victimas-trafico.aspx>
- STC núm. 108/1984, de 26 de noviembre. (21 de diciembre de 1984). Tribunal Constitucional. España: BOE supl. al núm. 305, página 8, II Fundamentos Jurídicos, apartado b).
- STS 672/2019. (15 de enero de 2019). *CENDOJ*. Obtenido de Poderjudicial.es: <https://www.poderjudicial.es/search/indexAN.jsp>







**Isaac Llorente Blanco**  
1st Corporal of Guardia Civil  
Driver Specialist ATGC

**CRIMINOLOGICAL ASPECTS OF ROAD  
SAFETY TECHNICAL CRIMINOLOGICAL  
REPORTS**



## CRIMINOLOGICAL ASPECTS OF ROAD SAFETY TECHNICAL CRIMINOLOGICAL REPORTS

**Summary:** 1.- INTRODUCTION 2.- CRIMINAL POLICY ON ROAD SAFETY 3.- JUSTIFICATION OF TRAFFIC CRIMINOLOGY 4.- LEGISLATIVE FRAMEWORK 5.- IMPLEMENTATION OF CRIMINOLOGICAL REPORTS 6.- CONCEPTUAL FRAMEWORK OF REFERENCE 7.- OPERATIONAL MODEL 8.- METHODOLOGY 9.- INTERPRETATION OF RESULTS 10.- CONCLUSIONS.

**Resumen:** El derecho a la vida y a la integridad personal son los derechos humanos más esenciales. La sociedad no debe dejar de preocuparse por el creciente problema de salud pública que existe por culpa de la delincuencia vial. La criminología, en base a su conocimiento empírico de la conducta desviada, propone una metodología a seguir para atajar las conductas delictivas de algunos de los usuarios de las vías públicas. Para ello utiliza las técnicas que desarrolla su ciencia como una herramienta, como puede ser el “informe técnico criminológico”. Dicho informe recoge los factores criminógenos más relevantes de los delincuentes del tráfico, combatiendo la violencia vial con el máximo rigor del ordenamiento jurídico, ayudando y auxiliando a los órganos judiciales para la mejor elección de la pena, valorando el peligro o riesgo causado y la probabilidad de reincidencia individual.

**Abstract:** The right to life and personal integrity are the most essential human rights. Society should not stop worrying about the growing public health problem that exists due to road crime. Criminology, based on its empirical knowledge of deviant behavior, proposes a methodology to follow to tackle the criminal behavior of some users of public roads. To do this, he uses the techniques that his science develops as a tool, such as the “criminological technical report”. This report includes the most relevant criminogenic factors of traffic criminals, combating road violence with the maximum rigor of the legal system, helping and assisting the judicial bodies for the best choice of sentence, assessing the danger or risk caused and the probability of individual recidivism.

**Palabras clave:** Criminología vial. Tráfico. Seguridad vial. Informes. Factores riesgo.

**Keywords:** Road criminology. Traffic. Road safety. Reports. Risk factors.

## 1 INTRODUCTION

### • CRIMINOLOGY AS A SCIENCE

Criminology can be defined as an empirical and multidisciplinary science that deals with the study of crime, the offender, the victim and the social control of criminal behaviour, which aims to provide valid and contrasted information on the origin of crime, the dynamics and main variables of crime, as well as effective crime prevention programmes, positive offender intervention techniques and the different models or systems with respect to crime (García-Pablos, 2003).

The main purpose of criminological research is to try to understand the behaviour of individuals, describing criminogenic phenomena as broadly and precisely as possible, establishing risk factors and protective factors that encourage or diminish deviant behaviour. To this end, the methodology used in criminological research is similar to that used in the social and natural sciences. Empirical analysis strategies are used, the basic pillar of which is the observation of the phenomena they deal with, and the establishment of hypotheses, explanations and predictions based on their observations (Redondo and Garrido, 2013), combining knowledge regarding the subject of interest such as the study of crime, understood as known in Sociology as “deviance”, defined as “the interest in the study of actions that break the pre-existing social order in some way”, as well as “all behaviour that deviates from the values and norms accepted by the majority of the social group” (Antón, 2009).

García-Pablos (2003) explains in his guide that crime is presented as a social and community problem. Social problems call for an attitude on the part of the researcher, which the Chicago school of criminology dubbed “empathy”. Empathy certainly does not mean sympathy or complicity with the offender and his world, but interest, appreciation, fascination for deep and painful human drama. This passion and attitude of commitment to the criminal scenario and its protagonists are perfectly compatible with maintaining a distance from the object and neutrality required from scientists.

### • CRIMINOLOGY IN ROAD SAFETY

Criminology has much to contribute to how people behave on public roads. There is extensive literature and experimental knowledge when it comes to road or traffic criminology as a practical science in charge of socially conspicuous behaviour (Kaiser, 1979); it is the science tasked with empirically analysing the deviant behaviour of road users (Mendoza, 2018), in order to identify the criminogenic factors that influence road safety, proposing responses to reduce road crime and traffic accidents (Llorente, 2020).

## 2 CRIMINAL POLICY ON ROAD SAFETY

The right to life and the right for personal integrity are the most basic and primary of all the rights recognised in the Spanish Constitution.

There is no doubt that since it began, road traffic and traffic on public roads has become a mass phenomenon (Kaiser, 1979), and as such, it has generated a series of risks and dangers to people, including but not limited to road crimes or traffic accidents.

At present, in an attempt to rectify these risks and dangers, Chapter IV of Title XVII of Book II “Road Safety” has been included in Articles 379 to 385 ter of the Criminal Code (CC), which describes punishable conduct in relation to driving motor vehicles, including but not limited to:

- Driving in excess of 60 kilometres per hour on urban roads and 80 kilometres per hour on interurban roads.
- Driving under the influence of alcohol and other drugs.
- Driving with manifest recklessness and endangering people’s lives.
- Leaving the scene of an accident involving casualties.
- The refusal to take an alcohol or other drugs test.
- Driving without a valid licence due to the deduction of all points or a court decision or without ever having obtained one.
- Placing unforeseeable obstacles, spilling substances or removing or overriding signage.

This conduct is what the prologue of the Organic Law 15/ 2017, amending the CC, refers to as “road violence”, stating that in order to prevent certain traffic actions from going unpunished, it is necessary to pursue the objective of increasing risk control over these road users.

In short, road violence encompasses all behaviours that intentionally do not comply with the most elementary rules of the road, including actions of harassment and intimidation that cause a risk to the physical integrity of road users, such as:

- Driving at extreme speeds.
- Overtaking manoeuvres in an abrupt and aggressive manner.
- Failure to keep a proper safe distance.
- Harassing the driver in front by flashing headlights.
- Driving in bad weather conditions without caution.
- Recurrent and unjustified use of the horn.
- Driving under substances that affect the capacity to drive.
- Failure to respect pedestrian crossings or priority signs.

It should be noted that, according to the Directorate General of Traffic (DGT) in 2022, road safety offences accounted for 42% of the urgent proceedings handled by prosecutors across Spain, a considerable increase on previous years. This volume of accusations and convictions for dangerous road offences is the highest on record and since the reform made under Organic Law 15/2007, surpassing the “psychological ceiling” of 100,000 convictions, as reflected by the coordinating prosecutor for Road Safety “after the pandemic and its restrictions, we have seen that there has been a change in the road habits of citizens, in such a way that these offences have increased and there has been a loss of road awareness that was not the case until recently” (Del Río, 2022).

According to the report of the public prosecutor's office for 2022, the provisional balance of road accidents on Spanish roads reflects a reduction in the number of victims, while also stating that, when analysing the court statistics, this drop in figures has not had any impact on road crime in Spain, which has seen the greatest increase in

recent years, both in terms of court proceedings initiated, charges brought and convictions handed down.

As can be seen in the press release in relation to the provisional balance of road accidents provided by the DGT, the number of people killed in traffic accidents has increased by 4% in 2022, with 1,145 people losing their lives on Spanish roads and a 10% decrease in the number of people injured. As the Minister of the Interior stated in the same press release, “we must continue working to tackle the causes, reduce the number of deaths and contribute to raising public awareness of the problem posed by traffic accidents and their painful consequences”. Another point of interest that demonstrates the scale of the problem is that 41% of admissions to the intensive care unit of Spanish hospitals are attributable to road accidents.

Criminologically speaking, the increase in these indicators as regards court activity and mortality is worrying, as reflected in the statements of the deputy prosecutors, it may be due to the “relative” return to normality after the pandemic, attributable to the effervescence produced in our driving habits by a misunderstood feeling of recovery of the freedom of restrictions and lockdown measures imposed, to the detriment and loss of part of the road awareness acquired by citizens before the pandemic.

### 3 JUSTIFICATION OF TRAFFIC CRIMINOLOGY

The justification of the criminologist as an integral part of the study and analysis of road safety offences can be traced to the continuous demand of the judiciary.

In the press release issued by the Public Prosecutor’s Office in 2011, the Public Prosecutor of the Road Safety Coordinating Chamber, Mr. Bartolomé Vargas Carrera, stated that “it is considered of extraordinary interest to promote criminological studies on road crime. Delving deeper into the causes of road safety crimes means collaborating with a justice system that is more sensitive to the reality of the facts and designing, in general, a more accurate response for the prevention of the great tragedies that take place on public roads”.

It must be pointed out that in his 11 March 2015 appearance in the Chamber of Deputies, this same public prosecutor stated that:

“The significant figure that road crime has reached in its application in the courts and in the involvement of almost the entire staff of the public prosecutor's office in it, dangerous crimes account for a third of the indictments that the public prosecutor's office formulates, accounting for thirty-six percent of the national total, of every hundred convictions in the whole country, thirty-six are in relation to road crimes... in addition, there is a large black figure regarding road crimes, since the person caught today, has committed the crime and could have committed twenty more before being caught, demanding a criminology statistic, an authentic real statistic, capable of coordinating existing databases, with specialists in statistics and criminology, to try to investigate and go deeper into the causes of the origin of these behaviours, because this will make the strategies more precise and accurate”. (Vargas, 2015).

#### 4 LEGISLATIVE FRAMEWORK

According to Circular 10/2011 in relation to road safety offences, the former State Attorney General, Mr. Cándido Conde-Pumpido, indicated that in order to improve the prosecution of dangerous conduct, criminal acts may be investigated by means of technical reports.

Along these lines, Chapter III of the Criminal Procedure Act (LECrim) speaks of “The identity of the offender and their personal circumstances”, in its Articles 377 and 378, states that, if the examining magistrate considers so appropriate, they may ask for well-founded reports on the accused from the mayors or police officers or take statements about the conduct of the accused from all persons who, given their knowledge of the accused, can enlighten them on the matter. Furthermore, Article 456 of the same law comments on the expert reports that enable the judge to understand or appreciate important facts or circumstances in the brief that is necessary or convenient for the purposes of scientific or artistic knowledge.

Title III bis of the reform of the LECrim, in Law 41/2015, entitled “Proceedings by acceptance of decree”, clearly refers to crimes against road safety, where traffic criminology has a place. The purpose of these proceedings is for the Public Prosecutor's Office to bring criminal proceedings, proposing the imposition of a fine or community service and, where appropriate, deprivation of the right to drive motor vehicles and mopeds, in addition to civil proceedings aimed at obtaining the restitution of the judgement.

The prosecutor in charge of the process by acceptance of decree, must observe the requirements, which the law states are that:

1. The offence is punishable by a fine or community service not exceeding one year and that the sentence may be suspended pursuant to Article 80 of the CC, with or without the deprivation of the right to drive motor vehicles and mopeds.
2. The Public Prosecutor's Office understands that the specific penalty applicable is a fine or community service and, where appropriate, the deprivation of the right to drive motor vehicles and mopeds.
3. No public or private prosecution is involved in the case.

It should be noted that Article 66.1-6 of the CC also allows the criminal sanction to be adjusted depending on the personal circumstances of the offender and the degree of severity of the act. Paragraph two of Article 80.1 of the Criminal Code, in relation to the suspension of the custodial sentence, indicates that consideration will be given to the circumstances of the crime committed, the personal circumstances of the person convicted, his or her background, his or her conduct after the crime, in particular his or her efforts to repair the damage caused, his or her family and social circumstances and the effects that may be expected from the suspension of the execution and measures that may be imposed. Article 385 ter speaks of a one-degree reduction in the penalty for lower degrees of risk.

Art. 803 bis c of the LECrim refers to the content that the Public Prosecutor's Office must send to the investigating court for approval and notification, which must contain the following points:



1. Identification of the person investigated.
2. Description of the punishable act.
3. Indication of the offence committed and brief description of the existing evidence.
4. A brief statement on the reasons why consideration is being given, where appropriate, to reducing the prison sentence.
5. Proposed penalties. For the purposes of this procedure, the Public Prosecutor's Office may propose a fine or community service and, where appropriate, the deprivation of the right to drive motor vehicles and mopeds, reduced by up to one third of the legally stipulated penalty, even when this entails the imposition of a penalty lower than the minimum limit stipulated in the CC.
6. Claims for restitution and compensation, where appropriate.

Therefore, as reflected in the CC and the LECrim, the figure of the criminologist is perfectly framed legislatively as support for the prosecutor, and at the same time offers relief as regards the substantial workload that the Administration of Justice usually has to bear. The implementation in the judicial cause of the "criminological technical report" is of essential importance in understanding all the circumstances surrounding the criminal conduct, the risk caused and the individual probability of committing more crimes of this nature, thus providing the Public Prosecutor's Office with greater procedural guarantees in its legitimisation to exercise the criminal action.

Recalling the 2010 Prosecutor's Office Report, in which the Chief Prosecutor of the Road Safety Prosecutor's Office, Mr. Bartolomé Vargas Cabrera, encouraged pursuing an initiative aimed at incorporating a criminological expert report on the person under investigation in the criminal investigation phase of cases involving offences against road safety, with a view to weighing and individualising the penalty to be imposed in accordance with Article 66.1-6 of the CC, stating that the criminological report is a working tool aimed at configuring an explanatory hypothesis of the conduct of the person under investigation and his or her prognosis of recidivism, with the following aims in mind:

- Study of the causes of all types of punishable acts.
- Understanding the danger posed by the subject and making a judgement, where appropriate, on the risk caused.
- Determining the type of penalty or measure to be applied and in any case the adoption of precautionary measures.

## 5 IMPLEMENTATION OF CRIMINOLOGICAL REPORTS

Some progress has already been made in relation to the inclusion of criminological reports in road safety matters. In 2010, with the help of the coordinating prosecutor for Road Safety and the chief prosecutor of Alicante, criminological interest was introduced in the court processing of road crimes, in collaboration with the Local Police of Elche and through the "Crimina" centre affiliated with the University of Elche, incorporating criminological reports in criminal proceedings for crimes against road safety.

Subsequently, in 2015, another project came about for including criminological risk reports in the reports of road crimes committed by reoffenders, carried out

by the Local Police of Murcia, which was joined by various local police forces, including but not limited to the Local Police of Madrid, Ourense and Lugo.

Since 2015, attempts have been made to implement technical criminological reports on road safety within the Traffic Unit of the Civil Guard. Finally, and following a difficult path, the first report of this type was produced in 2021, which was received with great enthusiasm, both by the prosecutor of the Road Safety Chamber, who said that “having read your technical criminological report, I acknowledge the effort and the work involved. I thank you very much for your excellent contribution to road safety and I invite you to continue in this direction as regards road violence”, as well as Professor Redondo Illescas who developed the “triple criminal risk theory”, the theoretical framework on which the reports is based, who wrote “the report may be of technical use in the field of road safety”.

## 6 CONCEPTUAL FRAMEWORK OF REFERENCE FOR THE REPORT

For the preparation of the criminological technical report, the theoretical reference is the unified model of crime developed by the Professor of Psychology and Professor of Criminology Dr. Santiago Redondo Illescas (2015), dubbed the “triple criminal risk” model (TCR), which structures the current criminological theories in an integrated and compatible way.

This model brings together the analysis of three sources of study: a) the “personal risks” of the antisocial offender (PR); b) the “prosocial support gaps” that the former received or is receiving (PS); c) the exposure of individuals to potential “offending opportunities” (OP).

The risk confluences corresponding to the three categories would indicate the likelihood of the individual committing crimes, weighted by the overall magnitude of the crime risk (Redondo, 2015), using the following formula.

$$f(\text{PR}, \text{PS}, \text{OP}) = \text{Probability of crime}$$

## 7 OPERATIONAL MODEL

Following the TCR theoretical model, we proceeded to identify the different individual risk and protective factors common to criminal behaviour, such as: childhood abuse, dropping out of school, poor self-control, thrill seeking, low empathy, external locus of control and the use of behaviour modifying substances, among others.

More specifically, the characteristic criminogenic factors of road safety offences are identified by means of a bibliographic compilation of information, based mainly on reports and studies published by private and official bodies with recognised experience in road safety, such as: the Directorate General of Traffic (DGT), the Insurance Business Association (UNESPA), the Public Prosecutor's Office and the University Institute for Research in Traffic and Road Safety (INTRAS), among others.

Following the review of literature and based on experience, it was noted that the main criminogenic risk factors related to traffic crime are as follows:

- ALCOHOL AND OTHER DRUG ABUSE

It is well known that the combination of alcohol and other drug use and driving is one of the most significant risk factors for causing a traffic accident or participating in criminal behaviour. Drink-driving is one of the biggest factors in road safety, according to a study carried out by the Road Safety Observatory, suggesting that 82% of people in Spain consider that alcohol has a strong influence on driving (Sánchez, 2008).

The abusive consumption of alcohol and other drugs is a major personal stressor, leading to a destructive spiral that results in major family, social and work-related problems, preventing the person from leading a full life. These behaviour-altering substances have a radical impact on decision-making and the impulse control system, leading in most cases to disinhibited behaviour, the consequences of which can be taken to driving and are intimately linked to the promotion of risky behaviour punishable by law.

To get an idea of the magnitude of the problem, according to an article by the director of the Road Prevention and Safety Area at the Mapfre Foundation, Mr. Jesús Monclus (2023), the total number of drivers involved in traffic accidents, one in three had drunk alcohol before the accident, with two in three drivers killed (66%) testing positive, and when it comes to other illegally traded drugs (amphetamines, cocaine, cannabis, opiates, etc.) one of every five drivers killed (22%) had ingested them before the road accident. In turn, according to the Prosecutor's Office 2010 report, the crime of driving under the influence of alcoholic beverages is undoubtedly the most relevant amongst the crimes committed in relation to road safety, with, in 2022, 55% of indictments and 57% of convictions coming under Article 379.2 of the CC, which criminalises driving under the influence of alcohol and other drugs.

- CAREER CRIMINALS

An important indicator of road crime is the analysis of career criminals, as it has been found that individuals who have committed different types of crimes also tend to commit road safety offences.

Their criminal career is considered as extending between when they starts and eventually stop their criminal conduct. Criminal careers can be either long or short, intense or mild in nature, depending on the person's circumstances. As Professor Ovejero indicates:

"... it can be taken into account that a poor family, cultural and educational environment combined with a highly destructured family leads, with all certainty, to poorer performance at school entailing problematic behaviour; this low educational level can lead to unemployment and in turn economic problems. When combined with the fact that this family has a home with serious shortcomings, in a neighbourhood that increases the likelihood of getting into bad company, added to the social ostracism, labelling and other cognitive processes entailed, we can gain an idea of why criminal careers tend to be long and continuous" (Ovejero. 2009).

- **IMPULSIVITY**

Lack of self-control is one of the fundamental causes of antisocial behaviour, especially the inability to resist the temptation to do something that is considered to be pleasurable but is forbidden by law (Garrido and Redondo, 2009).

Drivers with high impulsivity tend to adopt risky driving behaviours, infractions or offences against road safety, and impulsivity is even considered to be a personality trait in which there are more differences between offenders and non-offenders (Lijarco, J.I.; Escamilla, C.; López, C.; Puchades, R.; Marti-Belda, A.; Bosó, P.; Montoro, L. 2016).

- **THRILL SEEKING**

The relevance of thrill-seeking as a risk factor in ordinary crime is more than accepted. Zuckerman defines this as a trait that involves “the search for varied, new and complex experiences and sensations, and the willingness to take physical, social, legal and financial risks in order to achieve these expectations”. (Zuckerman, 1994, cited in Garrido and Redondo, 2019).

It is of major interest to individuals who seek to satisfy these urges by driving motor vehicles, as the easy access to them means that they can choose to drive at high or inappropriate speed at any time, which implies taking a risk that is most of the time uncontrolled.

- **ACCIDENT-PRONE ATTITUDE TO TRAFFIC ACCIDENTS**

There is a broad consensus that people’s attitudes have a significant influence on road safety, and the disposition, beliefs and way of behaving when driving a motor vehicle can trigger riskier behaviour. If the individual believes that traffic accidents are relatively infrequent and tends to think that nothing is likely to happen to him or her, it is easier for them to adopt a riskier driving style (Montoro, 2014).

Other erroneous beliefs that encourage attitudes prone to causing a traffic accident are not recognising the action of driving as dangerous, lower risk perception, overconfidence in their driving ability, considering themselves better drivers than others and blaming everything that happens to them on external agents and not recognising their own responsibility.

- **DRIVING STYLES**

The University of Granada published a study on recurrence in traffic offences, noting that one of the best predictors of road crime is an uninhibited driving style (Padilla, Doncel, Gluiotta and Castro, 2018).

Driving styles can be defined as the forms and habits that we normally adopt when driving on public roads. Whenever we drive a motor vehicle we tend to adopt a characteristic driving style, which can be categorised as aggressive, passive or defensive.

However, caution should be exercised when analysing these, as a pure driving style is not always adopted; most drivers move from one category to another, depending on their personal, environmental or situational circumstances. It is also interesting for the interpretation of the results to identify the driving style used, as it provides methodological clarity that helps in the assessment of the risk caused in the conclusions of the report (Llorente, 2022).

- **Defensive style** is that of a driver who drives with confidence in their own behaviour, without expecting others to behave in an appropriate and expected manner, taking into account that road or vehicle conditions are not always optimal. They anticipate the risks inherent to traffic. For example, a good observation of our surroundings, appropriate speed and keeping a safe distance allow us to anticipate the reactions of other drivers and road users, thus minimising risks.
- **Passive style** is that of a driver who, while driving with confidence in his or her behaviour, also relies on others to behave in an appropriate and expected manner, thus failing to perceive risks adequately. This overconfidence in the behaviour of others implies not observing the environment correctly, losing the ability to react in order to avoid mishaps.
- **Aggressive style** is that of a driver who does not observe the most elementary traffic rules, uses aggressive, intimidating or harassing behaviour that endangers the physical integrity of other road users, taking unnecessary risks and performing reckless and abrupt manoeuvres.

As explained by Professor of Road Safety, Luis Montoro (2014), violent drivers “use the car as a means to increase their level of aggressiveness, giving rise to violent and reckless driving styles, where competitiveness is quite frequent. As a result, they make the public space an extremely dangerous place for other people”.

## 8 METHODOLOGY

As part of the preparation of the criminological report, a variety of techniques are used, such as semi-structured personal interviews, indirect profiling, documentary or experimental observation and the completion of different questionnaires; where the necessary information is obtained about personal risks, lack of prosocial support and criminal opportunities.

One of the main phases of the information collection process is personal interviews. The first observation that should be made when conducting the interview is whether the person under study is free of cognitive impairment, in order to then obtain the necessary information within the theoretical framework to help identify the indicators that promote criminological influence.

Once the risk and protective factors have been identified, an analysis is performed as to which risk factors are considered most relevant, since depending on the intensity with which they are manifested, they may influence the individual to a greater or lesser extent, and may be associated with other risk factors of a different nature, which would reciprocally enhance the risk between personal characteristics, lack of prosocial support and criminal

opportunities; this accumulation of inter-source risks implies a high probability of criminal behaviour (Redondo, 2015).

Another of the techniques used is direct observation, which is a valuable tool for gathering information, as it allows us to obtain relevant data from the person, not only from what they communicate, but also from how they express it. This fieldwork is characterised by the stress generated by the interview itself, where the person gives a glimpse of information that cannot be so easily simulated.

Available data sources on the person, such as police and court records, should be analysed, which provide information on patterns of behaviour and show their criminal versatility and criminal career in an objective way.

To complement these techniques, questionnaires can be used to verify the existence of cognitive impairment (Pfaifer test), or disorders related to alcohol consumption (AUDIT) or other drugs (ASSIST), or questionnaires to assess risk perception (DGT).

One of the circumstances that may arise when carrying out the analysis of a person is that the person does not accept voluntarism and collaboration to safeguard this important source of information, using the technique of indirect profiling, that is, “inferring the personality traits of a subject without their explicit participation, knowing how to record observational and behavioural indicators” (Sotoca, González and Halty, 2019); formulating the inferences of the criminogenic risk factors to reach conclusions by means of alternative forms to the personal interview, such as interviews with people in the environment or documentary analysis.

## 9 INTERPRETATION OF THE RESULTS

Once the aforementioned techniques have been carried out, the personal risk factors, the lack of prosocial support and the criminal opportunities observed are catalogued, assessing the factors corresponding to the different categories and dichotomously identifying those with the greatest criminological influence, and based on the relationship of convergence between them and the accumulation of the same, a prognosis is made in a logical, reasonable and motivated manner as part of which a response can be given to the requirements of the administration of justice in relation to the reasons for the criminal conduct, the personal, family and social circumstances, as well as the danger generated and the assessment of the risk caused, in addition to the individual probability of repeated road safety offences.

## 10 CONCLUSIONS

Road safety is intimately linked to the most essential rights of our legal system, such as life and personal safety.

Therefore, combating traffic crime must be a priority, guaranteeing the rights of the people who are victims of road violence, as well as the legal rights of the person who commits the offence, assessing these high-risk conducts individually, and trying to

provide valid and contrasted information on the genesis, dynamics and main variables of road crime, with a view to establishing the penalty that most favours the reintegration of the convicted person, while also considering compensation for the damage caused.

Criminology is the empirical science in charge of providing this information; with this in mind, traffic criminologists must support the justice system and are qualified to clarify the evidential difficulties of this type of crime, drawing up a “technical criminological report” that provides the necessary elements of judgement to impose the most appropriate measures within the principles of our legal system.

Like other countries with developed policies in this sense, such as France, Germany and England, Spain should join this innovative criminological technique. The Traffic Unit of the Guardia Civil has a long history as a staunch defender of the rights of all road users.

This is why this project must continue with a view to identifying and minimising the serious traffic risks that are being committed, with the aim of saving hundreds of lives and preventing injuries every year, encouraged by the great positive impact at a judicial and academic level of the “criminological technical report”, which is seen as a useful and effective tool that contributes to reducing traffic accidents and road crime, improving road safety in Spain every day.



## REFERENCES

Antón, J.M. (2009). *Delito como cuestión social*. Solo Soluciones.

Carreras, J. A. (2015). *Aspectos Criminológicos en Materia de Seguridad Vial*. Criminología y Justicia.

Spanish Constitution Article 15. 29 December 1978. (Spain).

Circular 10/2011, 17 November. On criteria for the unity of specialist action by the Public Prosecutor's Office in matters of road safety. State Prosecutor's Office, 17 November 2011. (Spain).

Del Río, L. (2023). *Aumentan las condenas por delincuencia vial*. Revista Tráfico y Seguridad Vial. Retrieved 15 September 2023 from <https://revista.dgt.es/es/noticias/nacional/2023/07JULIO/0713-delitos-viales-fiscalia.shtml#>

Directorate General of Traffic. (2023). *Aumentan las condenas por delincuencia vial*. Retrieved 10 September 2023 from

<https://revista.dgt.es/es/noticias/nacional/2023/07JULIO/0713-delitos-viales-fiscalia.shtml>

Directorate General of Traffic. *Estrategia de Seguridad Vial 2021-2030*. Madrid. Retrieved 16 September 2023 from [https://seguridadvial2030.dgt.es/export/sites/sv2030/galleries/descargas/Estrategia\\_de\\_Seguridad\\_Vial\\_2030\\_Resumen.pdf](https://seguridadvial2030.dgt.es/export/sites/sv2030/galleries/descargas/Estrategia_de_Seguridad_Vial_2030_Resumen.pdf)

Directorate General of Traffic. Press release. Balance anual de siniestralidad vial. Retrieved 16 September: <https://www.dgt.es/comunicacion/notas-de-prensa/1.145-personas-fallecieron-en-siniestros-de-trafico-durante-2022/>

State Prosecutor's Office. (2010). *Memoria*. Retrieved 10 September 2023 from <https://www.fiscal.es/documents/20142/8e16bfc8-8140-3f23-2d72-ffd5d483f35e>

State Prosecutor's Office. (2022). *Memoria elevada al Gobierno de S.M.* Retrieved 10 September 2023:

[https://www.fiscal.es/memorias/memoria2023/FISCALIA\\_SITE/recursos/pdf/capitulo\\_III/cap\\_III\\_5\\_4.pdf](https://www.fiscal.es/memorias/memoria2023/FISCALIA_SITE/recursos/pdf/capitulo_III/cap_III_5_4.pdf)

García-Pablos, A. (2003). *Tratado de Criminología*. Tirant lo Blanch.

Organic Law 15/2007, of 30 November, amending Organic Law 10/1995, of 23 November, on the Criminal Code in matters of road safety. Official State Gazette, 1 December 2007, No. 288. (Spain).

Lijarco, J.I., Escamilla, C., López, C., Puchades, R., Marti-Belda, A., Bosó, P. and Montoro, L. (2016). *Programa de Intervención Psicoeducativa en Seguridad Vial*,

*sensibilización y reeducación vial*. Documentos Penitenciarios 15. Ministry of the Interior. Retrieved 15 September 2023 from [https://www.interior.gob.es/opencms/pdf/archivos-y-documentacion/documentacion-y-publicaciones/publicaciones-descargables/instituciones-penitenciarias/PROSEVAL\\_Manual\\_para\\_el\\_profesional\\_126160454\\_web.pdf](https://www.interior.gob.es/opencms/pdf/archivos-y-documentacion/documentacion-y-publicaciones/publicaciones-descargables/instituciones-penitenciarias/PROSEVAL_Manual_para_el_profesional_126160454_web.pdf)

Kaiser, G. (1979). *Estudios de Psicología Criminal. Delincuencia del Tráfico y su Prevención General*. Espasa-Calpe S.A.

Llorente, I. (2020). *La Criminología en los Siniestros de Tráfico*. Revista informativa y de Ciencias Policiales de la Unión Federal de Policía, n.95, p. 53.

Llorente, I. (2022). *La Criminología en los Siniestros de Tráfico*. Suboficiales, Revista de la Asociación Escala de Suboficiales de la Guardia Civil. ASEGSC Profesional, No. 34, p. 90.

Mendoza, M. (2018). *El Origen de un Grave Riesgo para la Seguridad Vial* (unpublished final undergraduate thesis). Universidad a Distancia de Madrid.

Milddendorff, W. (1976). *Estudios de Psicología Criminal. Estudios sobre la Delincuencia del Tráfico en el Tráfico*. Espasa-Calpe S.A.

Monclus, J. (2023). *Driving under the influence in Spain and proposals to save 650 lives annually*. Retrieved 14 September 2023: <https://www.linkedin.com/pulse/driving-under-influence-spain-proposals-save-650-lives-jesus-monclus>

Montoro, L. (2014). Programa de Intervención, Sensibilización y Reeducación Vial. Retrieved 15 September 2023: [https://www.dgt.es/export/sites/web-DGT/galleries/downloads/nuestros\\_servicios/permisos-de-conducir/recuperapuntos/2014-0841\\_INCOVIA\\_manual\\_formador.pdf](https://www.dgt.es/export/sites/web-DGT/galleries/downloads/nuestros_servicios/permisos-de-conducir/recuperapuntos/2014-0841_INCOVIA_manual_formador.pdf)

World Health Organisation. Global plan for the decade of action for road safety 2021-2030. Retrieved 9 September 2023: <https://www.who.int/es/publications/m/item/global-plan-for-the-decade-of-action-for-road-safety-2021-2030>

Ovejero, A. (2009). *Fundamentos de Psicología Jurídica e Investigación Criminal*. Ediciones Universidad de Salamanca.

Padilla, J., Doncel, P., Gugliotta, A. and Castro, C., (2018) *Which drivers are at risk? Factors that determine the profile of the offending driver*. Accident Analysis and Prevention. Volume 119.

Royal Decree of 14 September approving the Criminal Procedure Act. Official State Gazette, No. 260, 17 September 1982. (Spain).

Redondo, S. and Garrido, V. (2013). *Principios de Criminología*. Tirant lo Blanch, 2013.

Redondo, S. (2015). *El origen de los delitos*. Tirant Humanidades.

Sanchez, F. (2008). *Actitudes frente al riesgo vial*. Revista Intervención Psicosocial, No. 1, p. 57.

Sotoca, A., González, J.L. and Halty, L. (2019). *Perfiles Criminales. Principios, técnicas y aplicaciones*. Síntesis.

Semicyuc. Los siniestros de tráfico provocan 4 de cada 10 ingresos por lesión grave en la UCI. Retrieved 16 September 2023 from <https://semicyuc.org/2023/05/prensaretrauci/>

Vargas, B. (2015). Diario de sesiones del Congreso de los Diputados, 11 March 2015. Retrieved 08 September 2023 from [http://www.congreso.es/public\\_oficiales/L10/CONG/DS/CO/DSCD-10-CO-766.PDF](http://www.congreso.es/public_oficiales/L10/CONG/DS/CO/DSCD-10-CO-766.PDF)

### ACRONYMS AND ABBREVIATIONS

ASSIST:	Alcohol, smoking and substances involvement screening test.
AUDIT:	Alcohol use disorders identification test.
CA:	Lack of prosocial support.
CE:	Spanish Constitution.
CC:	Criminal Code.
DGT:	Directorate General of Traffic.
LECrim:	Criminal Procedure Act.
WHO:	World Health Organisation.
OP:	Criminal opportunities.
PR:	Personal risks.





**Iván Marcos Ortiz**

Santander Local Police Officer

PhD on Criminology

**Josefa Muñoz Ruiz**

Professor of Criminal Law

Murcia University

**Eduardo Osuna Carrillo de Albornoz**

Professor of Legal and Forensic Medicine

Murcia University

**PREVALENCE AND CRIMINOLOGICAL  
ASPECTS OF ALCOHOL AND OTHER DRUG  
USE IN DRIVERS TESTED IN URBAN  
SETTINGS DURING THE CORONAVIRUS  
PANDEMIC.**



## PREVALENCE AND CRIMINOLOGICAL ASPECTS OF ALCOHOL AND OTHER DRUG USE IN DRIVERS TESTED IN URBAN SETTINGS DURING THE CORONAVIRUS PANDEMIC.

**Summary:** 1. INTRODUCTION 2. METHODOLOGY 2.1. Study design and target population 2.2. Statistical treatment 3. RESULTS 3.1. Characteristics of drivers who tested positive for alcohol in exhaled air. 3.2. Characteristics of drivers who tested positive for other drugs detected in oral fluid. 4. DISCUSSION. 5. CONCLUSIONS 6. REFERENCES.

**Resumen:** La siniestralidad vial constituye un problema de salud pública. La relación entre siniestralidad y consumo de sustancias tóxicas es incuestionable. En 2020 la pandemia por el COVID-19 provocó una crisis sanitaria sin precedentes y se adoptaron medidas que limitaron la movilidad de los ciudadanos. También se observaron cambios en los patrones de consumo de sustancias tóxicas. Se registró un descenso en la prevalencia del consumo de alcohol, tabaco, cannabis y cocaína y un aumento en el consumo de hipnosedantes sin receta. En el presente estudio, nos planteamos conocer la prevalencia del consumo de alcohol y de otras drogas en una población de conductores en el ámbito urbano sometidos a pruebas de detección y la posible repercusión sobre la seguridad vial que tuvieron las medidas de restricción de la movilidad, instauradas durante la pandemia. Para ello hemos realizado un estudio transversal descriptivo en conductores de vehículos en las vías urbanas y travesías de la ciudad de Santander, en el año 2020. Se realizaron 3.680 pruebas de determinación de alcohol y 275 de otras drogas. Nuestros resultados demuestran que en el 20,82% de las actuaciones se encontraron resultados positivos al alcohol y/u otras drogas. El perfil del conductor que muestra la presencia de alcohol es varón entre los 25 a 44 años, que circula en fin de semana entre las 11 de la noche y las 7 de la madrugada y presenta una tasa de alcohol en aire espirado superior a 0,60 mg/l. El perfil del conductor positivo a otras drogas es varón, entre 25 a 44 años que circula cualquier día de la semana, entre las 7 de la tarde y las 12 de la madrugada. Las principales sustancias consumidas son el cannabis (75,31%) y la cocaína (44,03%). Se constata que durante los meses en los que no hubo confinamiento el 13,02% de las alcoholemias realizadas y el 30,19% de las pruebas de detección de otras drogas fueron positivas, mientras que en el período de confinamiento los porcentajes subieron al 23,44% y al 38,57%, respectivamente.

**Palabras clave:** Alcohol, drogas, seguridad vial, COVID-19.

**Abstract:** Traffic accidents constitute a public health problem. The relationship between traffic accidents and the consumption of toxic substances is undeniable. In 2020, the COVID-19 pandemic caused an unprecedented health crisis which led to measures being adopted in limiting citizen mobility. A subsequent change in the consumption patterns of toxic substances was also observed. There was a decrease in the prevalence of alcohol, tobacco, cannabis, and cocaine use, and contrarily an increase in the consumption of non-prescription sedatives. The aim of this study is to analyse the prevalence of alcohol use and other psychoactive substances in a population of drivers subjected to alcohol and other drug testing in urban areas. This study evaluates the possible impact that mobility restriction measures adopted during the pandemic had on road safety. To achieve this, we carried out a cross-sectional descriptive study on vehicle drivers on urban roads and



crossings in the city of Santander in the year 2020, where we conducted 3,680 alcohol tests and 275 other drug tests. Our results demonstrate that positive results for alcohol and/or other drugs were found in 20.82% of the cases. The profile of the driver positive for alcohol shows a male driver between the ages of 25 and 44, who drives during the weekend between 11 pm and 7 am and presents a breath alcohol level higher than 0.60 mg/l. The profile of the driver positive for other drugs is male, between 25 and 44 years old, who drives with a uniform distribution throughout the week, in the period between 7 pm and midnight. The main substances in this profile are cannabis (75.31%) and cocaine (44.03%). It is confirmed that during the months without confinement, 13.02% of the alcohol tests and 30.19% of other drug tests were positive, while during the confinement period the percentages rose to 23.44% and 38.57%, respectively.

**Keywords:** Alcohol, drugs, road safety, COVID-19.

## 1. INTRODUCTION

The World Health Organisation (WHO) considers road accidents to be a global public health priority. Every year globally, approximately 1.35 million people die and about 50 million people suffer non-fatal injuries from road accidents, and many of these injuries result in disability (WHO, 2018). In 2022, the European Union experienced a 3% increase in road accident fatalities compared to the previous year (reaching 20,600 victims) as a result of the resumption of mobility after the pandemic. In the same period, Spain had a rate of 36 deaths per million inhabitants, lower than the European average of 46 (European Commission, 2023).

The link between accident rates and psychoactive substance use is undeniable. The presence of these substances in the body affects the driver's abilities to a greater or lesser extent, posing a risk to road safety. According to the results of the autopsies performed, 52.81% of the drivers killed in 2022 tested positive for alcohol, drugs of abuse and psychotropic drugs (INTCF, 2023). This is a worrying figure and there has been an upward trend over the last five years, given that the percentage was 42.1% in 2017. Alcohol is the most common intoxicant and its consumption is very socially acceptable, with 64.5% of Spaniards (almost two thirds) admitting to having consumed it in the last 30 days (EDADES, 2022). First consumption occurs at an early age (16.5 years) and 93.2% of 15–64 year olds report having consumed it at some time in their lives. Among illegal psychoactive substances, cannabis and cocaine stand out for their high prevalence. Some medicines, although consumed less frequently than alcohol, also pose a growing threat to road safety.

The Covid-19 pandemic put the world in an unprecedented and unfamiliar situation that led to an unprecedented health crisis. On 14 March 2020, a state of emergency was declared, which resulted in the population being locked down. On 28 April, a plan was announced to gradually reduce the lockdown restrictions. In relation to the issue at hand, a change in patterns of substance use was observed. In Spain, there was a decrease in the prevalence of alcohol, tobacco, cannabis and cocaine use, and an increase in the use of hypnotics without prescription (OEDA, 2020). Alcohol and cannabis use decreased in both sexes and at all ages, with a more pronounced decrease among young people under 25 years of age. However, the use of hypnotics without prescription increased: from 1.9% in the months prior to the survey, it rose to 3.1%, a statistically significant increase that was more pronounced among women. This increase was found in all age groups, although to a greater extent in subjects between 25 and 54 years of age. During the most severe peaks of the pandemic, a decrease in alcohol and drug testing was also observed. They were sometimes limited to road accidents and situations where erratic driving or symptoms suggesting the influence of intoxicants on driving were observed.

In the summer of 2020, health measures were more flexible and certain restrictions remained in force in catering establishments, especially those related to nightlife, a sector closely linked to the field of road safety given its special relationship with alcohol consumption. Following the adoption of the state of emergency in response to the second wave of the pandemic, a night-time curfew (between 11 pm and 6 am) was maintained from 26 October and remained in force beyond the end of the study. Therefore, all these restrictions had an impact on citizens' mobility and nightlife, and consequently on road safety.

In this study, we set out to find out the prevalence of alcohol and other psychoactive substance use in a population of drivers screened in urban settings, and the possible impact of mobility restriction measures adopted during the pandemic on road safety in terms of substance use.

## 2. METHODOLOGY

### 2.1. Study design and target population.

We conducted a descriptive cross-sectional study. The study sample consists of drivers of vehicles that travelled on the roads of the city of Santander (urban roads and crossings) throughout 2020. This sample was selected in accordance with the provisions of the General Road Traffic Regulations (RGC), which specifies who is required to undergo the legally established tests for alcohol and other drugs. In this respect, the inclusion criteria were as follows (Art. 21 RGC):

*"a) any road user or vehicle driver directly involved in a road traffic accident as a possible liable party.*

*b) those who drive any vehicle with obvious symptoms, manifestations or facts which give rise to a reasonable presumption that they are driving under the influence of alcoholic beverages.*

*c) drivers who are reported for committing any of the infringements of the rules contained in these regulations.*

*d) those who, when driving a vehicle, are required to do so by the authorities or their agents as part of a programme of preventive breathalyser checks ordered by those authorities.*

A total of 120 variables from the report and official databases were analysed and classified into the following blocks: 1) socio-demographic data of the driver; 2) vehicle information; 3) general details of the event; 4) type of offence or crime; 5) previous history; 6) toxicological findings related to alcohol or drugs; 7) crash information (if applicable).

In accordance with Table 1 two periods were defined, differentiating between working days and weekends/holidays. In addition, each day was divided into three time slots: morning, evening and early morning.

Table 1. Periods and time slots for recruitment of subjects.

General periods	
Working days	From Monday at 7:00 am to Friday at 11:59 pm.
Weekends/holidays	From Saturday at 00:00 am to Monday at 6:59 am. Holidays from 00:00 am to 11:59 pm
Time intervals	
Morning	From 7:00 am to 3:59 pm.
Evening	From 4:00 pm to 10:59 pm.
Early morning	From 11:00 pm to 06:59 am.

*Source: Marcos Ortiz (2023)*

The Santander Police Report Unit carried out tests for alcohol in exhaled air and drugs in oral fluid. During the preventive checks, drivers were randomly selected. In the case of substances other than alcohol, a preliminary test was carried out following the established protocol, which was then followed by the collection of samples for subsequent toxicological analysis by solid-liquid extraction technique and liquid chromatography coupled to tandem mass spectrometry in a specialised laboratory. Only substances that showed positive results in the initial test were analysed and an upper quantification limit of 500 ng/ml was applied. The substances and metabolites tested were exclusively delta-9-tetrahydrocannabinol, amphetamine, methamphetamine, MDEA, MDMA, MDA, cocaine, benzoylecgonine, morphine, 6-acetyl-morphine (heroin) and codeine.

## 2.2. Statistical processing

The data collected was coded for statistical analysis using IBM SPSS Statistics software (version 28). A descriptive study was carried out, analysing frequencies and percentages for qualitative variables and mean, median and standard deviation for quantitative variables. We used a contingency table analysis to explore the association between variables through Pearson's Chi-square statistical test, performing a corrected standardised residuals analysis to interpret the association. P values < 0.05 were considered significant.

## 3. RESULTS

During 2020, 3,680 breath alcohol tests and 275 saliva drug tests were carried out in Santander. In this period, 766 (20.82%) actions were documented with positive results for different psychoactive substances, of which 522 were for alcohol (14.19% of the breathalyser tests carried out) and 243 for other drugs (88.36% of those carried out). In 29 subjects, the tests were positive on two different occasions and in two individuals on three occasions.

Of the 766 drivers subjected to the analysis (see Table 2), 89.95% were men with an average age of  $38.96 \pm 0.47$  (SD 12.25), within an age range of 15 to 84 years. 10.05% were women, with a mean age of  $37.70 \pm 1.31$  (SD 11.50), ranging from 20 to 70 years. The majority of drivers (58.49%) who tested positive for a psychoactive substance were in the 25–44 age group. Spanish nationality predominated in 85.51% of the cases and car driving accounted for 86.42%. 74.94% of the positive tests were carried out on the city's

main roads. The highest prevalence was observed on weekdays during the evening period (32.12%) and on weekends/holidays in the early morning (33.29%). In terms of offences related to psychoactive substances, 67.10% showed alcohol levels above the permitted limits, 30.68% showed the presence of other drugs, and 1.04% showed a combination of alcohol and other drugs. In addition, 1.17% of drivers refused to be tested.

Table 2. Socio-demographic characteristics of the sample studied.

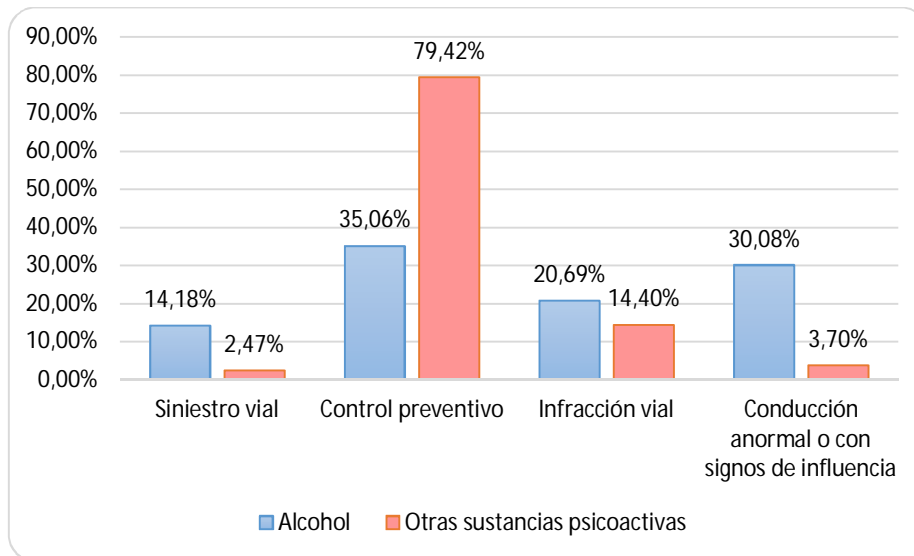
	Male, n = 689		Female, n = 77		Total, n = 766	
	n (%)		n (%)		n (%)	
Gender	689 (89.95)		77 (10.05)		766 (100%)	
Average age	38.96 ± 0.47 (DS 12.25)		37.70 ± 1.31 (DS 11.50)		38.83 ± 0.44 (DS 12.17)	
Age group						
15–24 years	88 (12.77)		11 (14.29)		99 (12.92)	
25–34 years	196 (28.45)		23 (29.87)		219 (28.59)	
35–44 years	207 (30.04)		23 (29.87)		229 (29.90)	
45–54 years	111 (16.11)		15 (19.48)		127 (16.58)	
55–64 years	72 (10.45)		3 (3.90)		75 (9.79)	
65 and over	15 (2.18)		2 (2.60)		17 (2.22)	
Country of origin						
Spain	592 (85.92)		63 (81.82)		655 (85.51)	
Latin America	50 (7.26)		11 (14.29)		61 (7.96)	
Rest of Europe	39 (5.66)		3 (3.90)		42 (5.48)	
Africa	5 (0.44)		0 (0.0)		5 (0.65)	
Asia	3 (0.73)		0 (0.0)		3 (0.49)	
Type of vehicle						
Saloon	594 (86.21)		68 (88.31)		662 (86.42)	
Motorbike	44 (6.39)		3 (3.90)		47 (6.14)	
Van	21 (3.05)		2 (2.60)		23 (3.0)	
Moped	16 (2.32)		3 (3.90)		19 (2.48)	
Other	14 (2.03)		1 (1.30)		15 (1.96)	
Period	W	WE/PH	W	WE/PH	W	WE/PH
Morning (7:00 am to 3:59 pm)	8 (1.16)	26 (3.77)	1 (1.30)	4 (5.19)	9 (1.17)	30 (3.92)
Evening (4:00 pm to 10:59 pm)	233 (33.82)	103 (14.95)	13 (16.88)	5 (6.49)	246 (32.12)	108 (14.10)
Early morning (11:00 pm to 6:59 am)	94 (13.64)	225 (32.66)	24 (31.17)	30 (38.96)	118 (15.40)	255 (33.29)
Presence of psychoactive substances						
Alcohol	450 (65.31)		64 (83.12)		514 (67.10)	
Other drugs	225 (32.66)		10 (12.99)		235 (30.68)	
Alcohol + other drugs	7 (1.02)		1 (1.30)		8 (1.04)	
Refusal to carry out the tests	7 (1.02)		2 (2.60)		9 (1.17)	

Note: W (Weekday) WE/PH (Weekend/Public Holiday)

Source: Adapted from Marcos Ortiz (2023)

Figure 1 illustrates the circumstances leading to the testing and the substances found. In the case of alcohol, 35.06% of the positive results arose in the context of preventive controls, 30.08% after showing signs of being under the influence of alcohol, 20.69% after committing a traffic offence and 14.18% as a result of a road accident. For drugs, 79.42% of positives were recorded as a result of a preventive control, 14.40% as a result of an offence, 3.70% as a result of abnormal driving or signs of being under the influence of drugs and 2.47% as a result of a road accident.

Figure 1. Reason for testing according to substance identified.

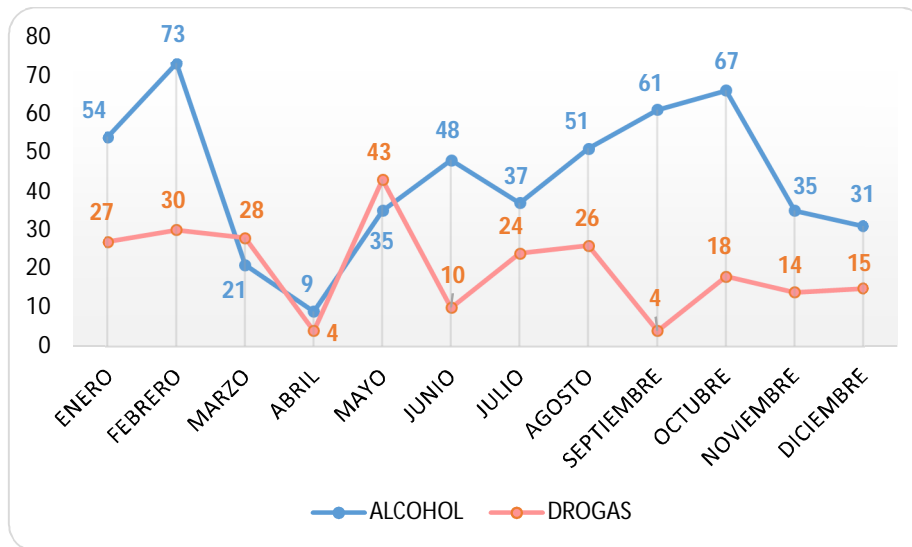


*Source: Adapted from Marcos Ortiz (2023)*

presents the monthly distribution of positive results. Non-uniform variation is observed due to the restrictions applied and the shortage of drug testing at certain times. Positive results for alcohol exceeded those for other drugs during all months of the year except March and May. In April, there was a marked decrease in positive results for all substances, attributable to the mobility restrictions enacted during lockdown. An upturn was observed during the summer months. There was another decline in the last two months of the year following the introduction of a night-time curfew from 26 October, which had an impact on leisure activities. June and September saw a decrease in the number of positive drug results due to the shortage of supplies for the screening devices.

Local police officers initially identified 648 (84.60%) of these offences, while other security forces identified 35 (4.57%) offences. The remaining 83 (10.83%) offences were reported by citizens via the emergency telephone number (092 or 112), which underlines the relevance of the role of capable guardian or natural watchdog that any citizen can play in the field of road safety.

Figure 2. Positives for alcohol and other drugs by month.



Source: Adapted from Marcos Ortiz (2023)

We analysed the distribution of drivers who tested positive according to the different periods of mobility restriction (Table 3). During the period prior to the declaration of the state of emergency (between 1 January and 14 March), 146 (27.97%) tested positive for alcohol and 85 (34.98%) for other drugs. Between 15 March and 31 December, 376 (72.03%) tested positive for alcohol and 158 (65.02%) for other drugs. During the period from 21 June to 24 October, in which restrictive measures related to nightlife and hotel and catering capacity were enacted, 40.61% of positive breathalyser tests were obtained. The presence of drugs was also found during these weeks, specifically 28.40% of the total positives, which is the highest percentage among the different periods into which we have classified the pandemic months.

Table 3. Positive results for alcohol and other drugs and their relationship to the restriction measures enacted during the Covid-19 pandemic.

Period (2020)	Alcohol, n = 522 n (%)	Other drugs, n = 243 n (%)
Before the Covid-19 pandemic		
1 January to 14 March	146 (27.97)	85 (34.98)
During the Covid-19 pandemic		
15 March to 2 May	14 (2.68)	6 (2.47)
3 May to 20 June	72 (13.79)	48 (19.75)
21 June to 24 October	212 (40.61)	69 (28.40)
25 October to 31 December	78 (14.94)	35 (14.40)

With regard to the percentage of positive results in terms of the number of breathalyser tests carried out, the highest percentages were obtained in May (32.41%) and October (28.39%).

183 (23.89%) drivers (173 men and 10 women) were reported for serious infringements of the Organic Law for the Protection of Public Safety (LOPSC). In 39 of the cases, positive results were found for alcohol, 139 for other drugs and 3 for alcohol together with other drugs. Two subjects, who showed clear signs of driving under the



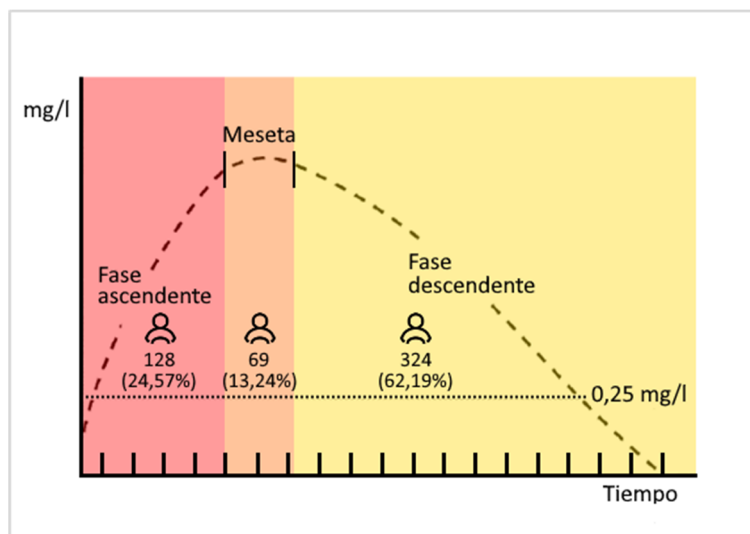
influence of alcohol or other drugs, refused to take the tests. In 129 cases (16.84%) the offences were due to the illegal use or possession of drugs; 38 (4.96%) to carrying prohibited weapons in the vehicle; 30 (3.92%) to disobedience or resistance to law enforcement officers; and 22 (2.87%) to other reasons sanctioned by the LOPSC.

### 3.1. Characteristics of drivers who tested positive for alcohol in exhaled air.

87.55% of the drivers are men (n=457) and 12.45% women (n=65) with ages ranging from 15 to 84 years. The most represented age group is 35 to 44 years old (27.01%), followed by 25 to 34 years old (23.75%), 45 to 54 years old (19.16%), 55 to 64 years old (14.18%), 15 to 24 years old (12.84%) and finally, the group of drivers aged 65 years and over (3.06%). The average alcohol concentration in exhaled air is  $0.62 \pm 0.01$  (SD 0.21) mg/L, with values varying from 0.22 to 1.41 mg/L. In 46.17% of the cases, the blood alcohol level was above 0.60 mg/L. For men, the most frequent rates were above 0.60 mg/L (47.05% of all men). In contrast, among women, rates between 0.40 and 0.60 mg/L (49.23% of all women) stood out.

From the variables related to the rates obtained in the first and second breathalyser tests, it was possible to determine at which stage of the BAC curve drivers were when intercepted by traffic officers (Figure 3). The data indicates that 24.57% of drivers were in the rising phase, 13.24% in the equilibrium phase (Grehant plateau) and 62.19% in the falling phase.

Figure 3. Number of drivers with positive results and their stage of the BAC curve.



Source: Adapted from Marcos Ortiz (2023)

Among the offences related to positive results for alcohol, 316 (60.54%) were prosecuted under administrative sanctions and 206 (39.46%) were investigated under criminal law.

The city centre accounted for 82.57% of the total number of alcohol positives, while the remaining 17.43% were distributed in the outskirts among the smaller population centres. A relatively low incidence of alcohol-related offences was observed during the mornings (4.79%), increasing during the evenings (31.42%) and with the highest values (63.79%) during the early mornings (Table 4). The highest number of positive results was

found during weekends and public holidays (60.92%). The working period was marked by a low presence of offences in the mornings (0.96%), with a notable increase in the evenings (18.01%) and early mornings (20.11%). However, during weekends and public holidays there was a slight increase in positives during the mornings (3.83%), a decrease during the evenings (13.41%) and a significant increase during the early mornings (43.68).

Table 4. Distribution of positive breathalyser tests according to time period and day of the week.

Period	Working day, n=204 n (%)	Weekend/public holiday n=318 n (%)	Total, n=522 n (%)
Morning (7:00 am to 3:59 pm)	5 (0.96)	20 (3.83)	25 (4.79)
Evening (4:00 pm to 10:59 pm)	94 (18.01)	70 (13.41)	164 (31.42)
Early morning (11:00 pm to 6:59 am)	105 (20.11)	228 (43.68)	333 (63.79)

Table 5 presents the statistically significant relationships found between the variable "alcohol positive" and other variables. We found a statistically significant association between the positive result for alcohol in the driver and the existence of traffic accidents, the sex and age of the driver, the day of the week, the time of day, the nucleus of action, the LOPSC offence and the impact of Covid-19 lockdown.

Table 5. Statistically significant associations using the  $\chi^2$  test obtained for the variables "positive for alcohol" and "positive for other drugs".

Variables	Positive for alcohol			Positive for other drugs		
	$\chi^2$	Df	Significance	$\chi^2$	Df	Significance
Branch of the legal system	89.856	1	P < 0.001	116.081	1	P < 0.001
Sex (driver)	10.584	1	P = 0.001	12.018	1	P < 0.001
Age (driver)	69.966	15	P < 0.001	67.050	5	P < 0.001
Age and positive for cannabis (THC)	-	-	-	58.262	5	P < 0.001
Age and positive for cocaine	-	-	-	43.587	5	P < 0.001
Time band	156.324	2	P < 0.001	152.978	2	P < 0.001
Day of the week	75.387	6	P < 0.001	69.897	6	P < 0.001
Population centre	65.941	4	P < 0.001	65.691	4	P < 0.001
LOPSC infringement	224.461	1	P < 0.001	233.595	1	P < 0.001
Road accident	26.650	1	P < 0.001	-	-	-
Impact of Covid-19 lockdown	3.166	1	P = 0.048	3.449	1	P = 0.041

*Source: Adapted from Marcos Ortiz (2023)*

There is a direct association between the BAC level and road crashes ( $P < 0.001$ ), since in 70.27% of accidents where the driver tested positive, the BAC level exceeded 0.60 mg/L, a percentage that increased to 90.54% for BAC levels above 0.40 mg/L. In relation to sex ( $P = 0.001$ ) and age of the driver ( $P < 0.001$ ), a higher prevalence is found in men (87.55%) compared to women (12.45%), especially in the 25–54 age group (69.92%). A significant association was found between "alcohol positive" and the day of the week ( $P < 0.001$ ) and the time of day ( $P < 0.001$ ). A higher frequency of positives is observed on public holidays and weekends (60.92%), as well as in the early morning hours (63.79%).

There is a statistically significant association between the period of time in which

there was or was not lockdown and the results obtained in the breathalyser tests. Of the 3,279 alcohol quantification tests carried out in the non-lockdown months, 13.02% were positive. In contrast, 401 tests were carried out during the lockdown period and 23.44% of them were positive.

### 3.2. Characteristics of drivers who tested positive for other drugs detected in oral fluid.

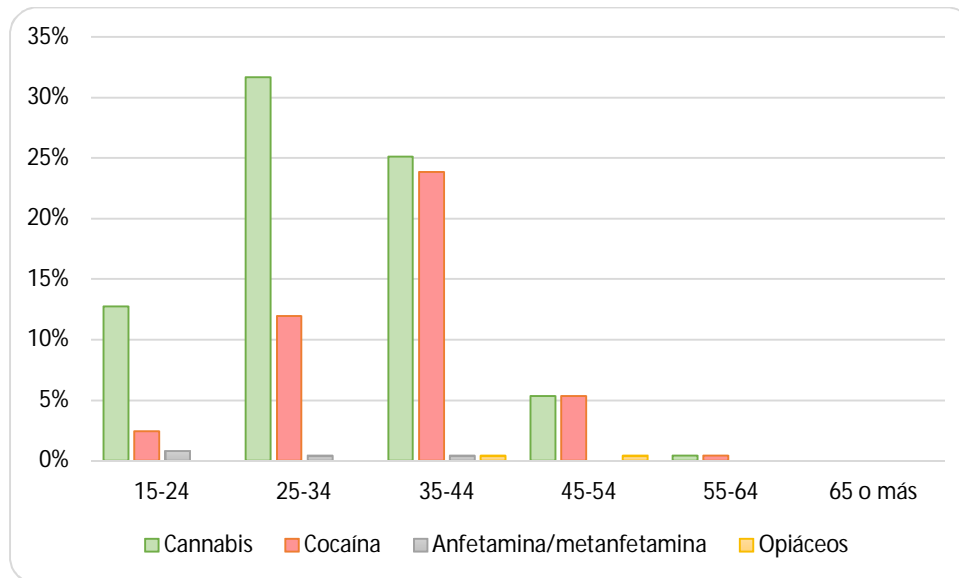
Toxicological tests on oral fluid samples revealed that 243 drivers, 232 (95.47%) men and 11 (4.53%) women, had one or more drugs other than alcohol in their system. The age of drivers ranged from 19 to 55 years, with the 25–44 age group being the most prevalent (76.13%), followed by the 15–24 age group (13.17%) and the 45–54 age group (10.29%). However, only one positive case (0.41%) was reported in the 55–64 age category, and no cases were reported for those aged 65 years and older. In the central area of the city, 143 (58.85%) positive results were detected, while 100 (41.15%) were observed in the outskirts.

The most common drugs were cannabis and cocaine, found in 183 (75.31%) and 107 (44.03%) drivers (n=243), respectively. Cannabis was found as the sole substance in 134 (55.14%) individuals and in 46 (18.93%) in combination with cocaine. This drug was found in 57 (23.46%) subjects. In addition, other combinations of substances were recorded in 6 (2.47%) drivers. Opiates and amphetamine/methamphetamine were identified less frequently, on only 2 (0.82%) and 4 (1.65%) occasions, respectively. According to their legal repercussion, 236 (97.12%) offences related to positive drug tests in oral fluids were prosecuted in the administrative sanctioning area, which contrasts with the low number of offences investigated in the criminal area, only 7 (2.88%).

Figure 4 shows the distribution of the substances found according to the different age groups into which we have categorised our sample. Cannabis is prevalent in the 25–34 age group (31.69%), while cocaine is more common in the 35–44 age group (23.87%). In the four cases where amphetamine compounds were found, two individuals were between 15 and 24 years old, one between 25 and 34 years old and one between 35 and 44 years old. As for opiates, the two localised cases involved drivers between 35 and 44 years of age.

According to the temporal analysis, 77.78% of the positive results for drugs were obtained during the evening, 16.46% during the early morning and 5.76% in the morning. During weekday evenings, 125 (51.44%) positives for cannabis and 55 (22.63%) for cocaine were documented. In contrast, on weekend or public holiday evenings, 29 (11.93%) positive cases were observed for cannabis and 20 (8.23%) for cocaine. During the early morning hours of weekends and public holidays, more positive cases were recorded for cannabis (7.82%) than for cocaine (4.94%). However, during early weekday mornings, cocaine (4.12%) showed a higher prevalence than cannabis (1.65%). Mornings were the time band with the lowest number of positive cases for any drug and, during weekends and holidays, cocaine predominated (3.29%).

Figure 4. Distribution of positive results according to substance identified and age group.



Source: Adapted from Marcos Ortiz (2023)

We found a statistically significant association (Table 5) between the "drug positive result" and the sex variable ( $P < 0.001$ ) and age of the driver ( $P < 0.001$ ), with a higher prevalence observed in men (94.47%) compared to women (4.53%), as well as in those aged between 25 and 44 years (76.13%). An association between age and the type of substance found is also evident, with cannabis ( $P < 0.001$ ) being more prevalent in the 25–34 age group (42.08%), while cocaine ( $P < 0.001$ ) is more common in the 35–44 age group (54.21%).

A significant association was also observed between the "drug positive" variable and the time band ( $P < 0.001$ ) and the day of the week ( $P < 0.001$ ), with the highest incidence of positive cases found in the evening (77.78%), especially during the working week.

In relation to the "positive for drugs" variable and the legal repercussion ( $P < 0.001$ ), it was found that the majority of these offences were reported administratively (97.12%).

In addition, a significant association is identified between the "drug positive" variable and the implementation of lockdown measures during the pandemic ( $P = 0.041$ ). In this context, during the non-lockdown months, 30.19% of drivers tested were positive, while during the lockdown period, this figure rose to 38.57%.

#### 4. DISCUSSION

This study was conducted in the city of Santander during 2020, conditioned by the Covid-19 pandemic and the restriction and lockdown measures adopted. This fact allows us to compare the results obtained according to time periods in which the mobility limitation was different.

During the first two and a half months, the activity developed normally. A total of 1,705 breathalyser and 95 saliva drug tests were carried out, with 146 (8.56%) positive for alcohol and 85 (89.47%) positive for other drugs. On 15 March, a state of emergency

was declared to deal with the health crisis, the situation was radically transformed and the restrictive measures implemented had a varying impact on people's mobility and thus on road safety. This led to a significant drop in the number of alcohol (1,975) and drug tests (180) in the following nine and a half months after the start of the pandemic.

The curfew decreed involved the absolute restriction of mobility on the roads 24 hours a day, except in exceptional situations. In this context, testing for psychoactive substances was almost entirely reduced and limited to the most serious situations (obvious signs of influence on driving or road accidents). In this regard, during the period between 15 March and the beginning of May, 30 breathalyser tests and 8 drug tests were carried out, with 14 (46.67%) and 6 (75.00%) positive, respectively. There is a clear decrease in the number of these offences compared to those recorded before the lockdown, in line with a lower traffic intensity. Similarly, Andres-Pueyo and Redondo (2021) note the considerable decrease in driving-related offences during lockdown (up to 80%), probably in association with the drop in road traffic (Redondo, *et al*, 2020). From an environmental perspective, this situation may have been a decisive factor in the radical decline of certain crimes (Stickle and Felson, 2020), in this case road offences. It is clear that the preventive measures implemented because of the Covid-19 pandemic affected social and interpersonal relationships, a major component in the genesis of crime, according to different criminological theories. Contingency that may have hindered the confluence in the same space and time of motivated potential offenders, suitable victims and the absence of effective protectors, the three necessary elements that, according to the theory of everyday activities, must converge for crime to increase (Redondo and Garrido, 2023).

From 2 May onwards, an increase in population mobility was observed as a result of the easing of the measures implemented. The number of tests performed and the number of positives increased. As a result, 134 alcohol tests were carried out up to 20 June, 72 (53.73%) of which were positive, and 52 saliva drug tests were carried out, 48 of which were positive (92.31%).

Although health measures were eased during the summer, some restrictions remained in place for hospitality establishments and in particular for nightlife. The latter is closely linked to road safety, due to the importance of alcohol consumption in this context.

Subsequently, new restrictions were implemented as of 26 October due to a new spike in positive coronavirus cases, which led to the adoption of a new state of emergency, including a night curfew between 11:00 pm and 6:00 am, a measure that would continue until the end of the study.

It is undeniable that the restrictions affected the lives of the population and therefore had an impact on road safety. However, a change in citizens' behaviour was also observed as a result of the restrictions imposed on hospitality and nightlife establishments. This made access to alcoholic beverages difficult at certain times, either because people could not leave their homes during lockdown or because they were not able to visit bars, restaurants, etc., or even because of the complete closure of nightlife. In this context, many people purchased alcoholic beverages in other types of licensed outlets than those operating during business hours (such as convenience stores) and consumed them at home and even on public roads, despite the fact that this constituted an administrative offence. Article 23.1 of Cantabria's Act 5/1997, of 6 October, on

Prevention, Assistance and Social Inclusion in Drug Addictions, establishes the prohibition of the *"sale and supply of any type of alcoholic beverages, free or not, through establishments of any kind, with the exception of establishments authorised for consumption and convenience stores, during night-time hours, understood as those between 10 pm and 8 am the following day."*

In this scenario, on an avenue located in the central area of the city, close to the border with the outskirts, there was a petrol station with a shop that met the legal requirements to be considered a "convenience store". Article 15 of Act 1/2002, of 26 February, on Commerce in Cantabria defines convenience stores as *"those which, with a useful surface area for display and sale to the public of no more than 500 square metres, remain open to the public at least eighteen hours a day and distribute their offer, in a similar way, among books, newspapers and magazines, food items, records, videos, toys, gifts and miscellaneous items."* This made it possible for the establishment to sell alcoholic beverages between 10 pm and 8 am the following day, a circumstance that generated a "call effect" among some citizens who, during the restrictions, drove a vehicle to purchase alcoholic beverages. In our study, we counted 25 road violations related to the presence of psychoactive substances on this road, 24 of which occurred during the most critical periods of lockdown and between 10:00 pm and 8:00 am.

In our opinion, it is a paradox that in an environment where the sale of alcoholic beverages is prohibited at night, the sale of alcoholic beverages is allowed in an urban petrol station. Considering the criminological theories related to opportunity, this represents a clear risk to road safety, since most customers wishing to purchase alcoholic beverages for consumption in the evening are likely to come to the petrol station in their vehicles. This creates an opportunity for drinking and driving offences. In this sense, it is important not to underestimate the significant role that opportunity plays in the genesis of crime, as it allows us to understand criminal acts more fully and to obtain additional information on patterns and trends. As suggested by Wortley and Townsley (2017), criminal behaviour, like many other deviant behaviours, is influenced by the immediate environment in which it occurs, as this perspective is based on the assumption that all behaviour results from an interaction between the person and the situation. The distribution of crime in time and space is not random; those who commit crimes act according to their own goals, preferences and life routines. Crime varies from place to place and street to street, and can peak at different times of the day, days of the week and weeks of the year. The aim of the analysis is to identify and describe these crime patterns.

In this context, it is relevant to mention the ten sub-principles of criminal opportunity proposed by Felson and Clarke (1998), some of which are worth contrasting with what was observed in the study for these patterns and trends: "opportunities play a role in causing all crime; criminal opportunities are highly specific; criminal opportunities are concentrated in time and space; criminal opportunities depend on the movements of everyday activity; one crime creates opportunities for another; some products offer more tempting criminal opportunities; social and technological changes produce new criminal opportunities; crime can be prevented by reducing opportunities; reducing opportunities does not usually displace crime; a targeted reduction of opportunities can produce a broader decline in crime." We will proceed to the analysis of some of these sub-principles.

a) "Opportunity plays a role in the causation of all crime". During the COVID-19 pandemic, the closure of licensed drinking establishments led to a clear criminal



motivation by allowing the purchase of alcoholic beverages at an urban gas station during the night.

b) "Criminal opportunities are highly specific". Opportunity to commit crimes should be assessed in specific categories and diminishing opportunities should also be specifically addressed. In this case, we are confronted with a very specific criminal opportunity, which requires concrete measures to eliminate it in our study sample.

c) "Criminal opportunities are concentrated in time and space". Our study shows that crime patterns and trends are concentrated both in time (between 10 pm and 8 am) and space (on a specific road in the city). The convenience store located in the gas station becomes a "crime generator" and a "crime lure", attracting people who initially would not have visited there, but who do so due to the circumstances.

d) "Criminal opportunities depend on the movements of everyday activity". Criminals often look for opportunities to commit crimes at the lowest possible risk. The 10 pm to 6 am time band coincides with the nightlife period and has fewer people and less surveillance on the roads, creating opportunities for crime.

e) "One crime creates opportunities for another". Once a crime is committed, the offender may be involved in other crimes unexpectedly. For example, drink-driving can increase the likelihood of committing other offences, such as driving without a licence, reckless driving, dangerous challenges with other drivers, evading or fleeing a police checkpoint, refusal to take tests for alcohol or other drugs, and even disobedience, resistance or assault on authority.

f) "Crime can be prevented by reducing opportunities". In this regard, public authorities have a responsibility to take measures to minimise opportunities for crime. In the case under discussion, an effective way to eliminate criminal opportunities would be to reform the regulation allowing the sale of alcohol in convenience stores located in petrol stations at night. This is a preventive measure that would help to reduce this type of crime.

In our analysis of 766 actions, we observed that 84.60% of the offences were detected by the local police, who have the direct capacity to prevent and control road safety in urban areas. The remaining actions (15.40%) were the result of citizen action (10.83%) and other security forces (4.57%), which also acted as road safety watchdogs. Social control theorists maintain that people have a natural tendency towards delinquency or deviant behaviour, but are constrained or inhibited by a series of social controls (e.g. Gottfredson & Hirschi, 1990; Hirschi, 1969). It was to be expected that most road policing (89.17%) would be carried out through formal social control mechanisms (police, private security services, etc.). However, in the field of road safety, informal social control, exercised by other actors to prevent, impede or cooperate in investigation and control, must also be considered as very important. In our study we counted the actions related to cooperation in the detection and investigation of road offences by other road users (10.83%), without being able to quantify other actions related to the deterrence or avoidance of this type of offences by friends, relatives of the potential offender, waiters in a bar serving alcohol, etc. In this sense, Eck complemented the routine activities theory (Cohen & Felson, 1979), where crime occurs when a motivated offender, a suitable target (victim or property), and the absence of an effective guardian to protect that target



converge in the same space and time, differentiating between the elements that constitute necessary conditions for committing the crime and those that, known as controlling factors, have the capacity to prevent it. It is important to underline the relevance of the role of the guardian capable of preventing crime in the field of road safety. This role can be played not only by traffic officers or members of other police forces (formal social control), but also by any individual who, in their daily routine, contributes to protecting road safety (informal social control).

Among the positives reported, 67.10% of the drivers showed alcohol as the only substance, 30.68% other drugs and 1.04% a combination of alcohol and other substances. In addition, 1.17% of the sample refused to take the toxicological analysis, although all of them were driving a motor vehicle or moped and exhibited outward signs of being under the influence of psychoactive substances, thus incurring the offence of Art. 383 of the Spanish Criminal Code (CP) (refusal to submit to legally established tests). The number of cases with positive results for alcohol is 2.2 times higher than those for drugs, a figure very similar to the data provided by the DGT in 2020 (State Prosecutor's Office, 2023), where administrative proceedings for alcohol (37,116) were twice as high as those for drugs (18,498). However, it is possible that our drug figures are under-represented, as according to police protocol drivers were tested for alcohol in all cases and were only tested for drugs in specific situations (following direct observation of drug use, the presence of external signs or other indications suggesting possible drug use). We should also consider that during the months of June and September there was a shortage of drug testing kits, which limited the number of controls. This circumstance is also mentioned in the Memoria de la Fiscalía General del Estado de 2023 (2023 Report of the State Prosecutor's Office), which highlights a 27% percentage increase in the number of alcohol controls carried out by the Agrupación de Tráfico de la Guardia Civil (Guardia Civil Traffic Unit; ATGC) in 2022 compared to the previous year, resulting in a 51% increase in alcohol-related administrative sanctioning proceedings. In contrast, the opposite phenomenon occurred with drug testing, with the number of drug tests performed dropping to 47% and the number of positive tests to 51%. However, *"this reduction seems to be due to a shortage of material resources rather than to the consequences of a pandemic that has already been overcome, considering that it did not affect the high volume of drug tests carried out in 2021,"* (State Prosecutor's Office, 2023).

In our study, 89.95% of positive drivers were men, compared to 10.05% women. In the specific case of alcohol (87.55% men and 12.45% women) the percentages are in line with data from the EDAP 2021 study (87.88% men and 12.12% women) (DGT, 2022). Regarding other drugs (95.47% men and 4.53% women) there is a high prevalence of positive results in men, which differs from other studies such as EDAP 2021 (82.07% men and 17.93% women), perhaps due to the restrictions of the study (drug testing was not randomised).

In the specific context of alcohol (n=522), the majority of drivers who tested positive had very high levels (above 0.50 mg/L). This is surprising because these are drivers on whom deterrence and road awareness seem to have no effect and who drive without worrying about high alcohol consumption. In addition, 29 drivers re-offended twice and 2 drivers re-offended three times.

As far as substances other than alcohol (n=243) are concerned, cannabis (75.31%) and cocaine (44.03%) were the most frequent, amounting to 23.89% and 13.97%

respectively of the total number of tests carried out. Other different drugs, such as amphetamine/methamphetamine (1.65%) and opiates (0.83%), were much less common. In contrast to alcohol, the majority of offences related to other substances (97.12%) were sanctioned administratively. This reflects the limited criminal response for drugs other than alcohol, with a large imbalance between administrative offences (237) and criminal offences (6). This situation is partly justified by the typical requirements of the offence of Art. 379.2 CP, which requires proof of the influence of toxic drugs, narcotics or psychotropic substances on the individual's faculties while driving, a condition that goes beyond the simple presence of these substances in the organism, a criterion that would suffice for administrative criminalisation. Therefore, the difficulty lies in proving such influence in criminal proceedings, unlike what is typified for alcohol, which would be sufficient to constitute the offence of exceeding the objective rate of Art. 379.2, second paragraph CP. Scientific evidence reveals that, considering the toxicokinetics of alcohol and the correlation between the concentration of alcohol in exhaled air and in blood, the higher the rate, the greater the impairment of the subject's faculties. However, such theses applied to alcohol are not per se transferable to other drugs, where the scientific premises differ from alcohol (State Prosecutor's Office, 2019). This can lead to a low willingness to prosecute from the beginning of the police intervention, except in less frequent situations where the influence of drugs is evident. The above confirms the concern already expressed by the Public Prosecutor for Road Safety Coordination *"to the judicial traffic police with instructions for the preparation of reports for offences of driving under the influence of toxic drugs, narcotics and psychotropic substances of Art. 379.2 CP."* In this instruction, it already pointed out that *"from this statistical data it can be deduced that there is a wide and growing administrative sanctioning prosecution of the drugs/driving binomial and a very limited or almost non-existent criminal prosecution out of step with the growing consumption of toxic substances in road traffic."* However, the referral of the aforementioned official letter established general guidelines for action by standardising the proceedings or reports of external signs of drug use and the criteria for referral to criminal proceedings which, together with the increasing specific training of agents, have contributed to the gradual growth of the criminal investigation of these events.

From a criminological perspective, a strong relationship is established between delinquency, social deviance and the risk-taking behaviour of these drivers in the area of road safety. In our study we observed a significant connection between the presence of psychoactive substances in drivers and violations of the LOPSC. Approximately one in four offending drivers (23.89%) was reported for both offences: illicit drug use or possession (16.84%), mainly cannabis (14.23%) and cocaine (2.35%). Administrative offences were also recorded for carrying prohibited weapons (4.96%) and for disobedience or resistance to traffic officers in the exercise of their duties (3.92%).

A relationship is also observed between the presence of alcohol and drugs in the driver and the existence of previous complaints as a consequence of committing an offence under the LOPSC. 31.11% of the drivers in the study (n=733) had previously been reported by the local police between 2009 and 2019 for infringing any of the rules set out in the LOPSC (29.33% men and 1.77% women). More than half of these drivers (52.13%) had already accumulated two or more different complaints. The most common offence on the record is the illicit use or possession of drugs (23.06% of the total sample). In addition, at least 11.73% of the drivers in the sample had previously been reported for positive breathalyser tests, both in criminal and administrative proceedings.

In terms of the location of testing, 74.94% of alcohol and other drug-related offences occurred in the city centre, while 25.06% occurred in the outskirts. When we analyse this data according to the type of psychoactive substance and the reason for the offence, we find that, in the case of alcohol, 82.57% of the actions took place on roads in the city centre, and 17.43% in the outskirts. In contrast, the percentages were more balanced for the other drugs: 58.85% in the central area and 41.15% in less-populated areas.

A remarkable fact is the number of offences reported in a outskirt where a "cannabis association" was located. According to its publicity, this association was created for *"therapeutic and non-profit purposes, with consumption shared among the members inside the premises, controlling the quantities supplied and always under optional support."* However, the Santander Magistrate's Court No. 5 ordered the temporary closure of the premises and the suspension of its activities at the end of 2020, which was subsequently ratified (Order of the Provincial Court of Cantabria 66/2021, of 17 February). In reality, this association is operated with a hidden activity of cultivation and production of cannabis involving the sale and distribution of narcotic substances, mainly marijuana and hashish. This circumstance was a clear area of concentration of criminal opportunities, also for certain administrative offences and offences against road safety.

We are aware of some limitations of the study related to the methodology used in police operations. The first is the random nature of preventive controls. In addition, there are many substances or combinations of substances that can be consumed and that can affect driving. However, many of them are not included in toxicological tests, such as substances for therapeutic use. Finally, as a limitation of the study, we must also include the context of the pandemic itself, during which there was also a shortage of toxic detection devices.

## 5. CONCLUSIONS

After analysing our results, we found two distinct profiles. One was a male driver (87.55%) between 25 and 44 years of age. These drivers tend to drive in the city centre, especially on weekends between 11 pm and 7 am. They have BAC levels above 0.60 mg/l in 47.05% of cases and are generally in the downward phase of the BAC curve. Infringements are sanctioned both administratively (60%) and criminally (40%).

The second profile corresponds to a driver who uses other drugs, mostly men (95.47%) aged between 25 and 44. These drivers drive both in the city centre (58.85%) and on the outskirts (41.15%) throughout the week, mainly between 7 pm and 12 am. The most frequent substances are cannabis (75.31%) and cocaine (44.03%). The 25–34 age group shows a higher incidence of cannabis use, while cocaine use is more prevalent in the 35–44 age group. Furthermore, it is quite common for these drivers to be involved in administrative offences in contravention of the LOPSC (58.19%).

In terms of how mobility restrictions influenced the population's consumption habits, it was found that during the months when there was no lockdown, 13.02% of alcohol tests and 30.19% of drug tests were positive, while in the period of lockdown the percentages rose to 23.44% and 38.57%, respectively.

## 6. REFERENCES

### BIBLIOGRAPHY

- Andrés-Pueyo, A., & Redondo, S. (2021). Confinamiento y criminalidad en España: un experimento criminológico natural (Lockdown and criminality in Spain: a natural criminological experiment). *Minipapers. PostC: crimen, ciencia y sociedad*. <https://innovacionmh.es/POST-C/2021/verano/index.html#p=47>
- Cohen, L. E., & Felson, M. (1979). Social change and crime rate trends: A routine activity approach. *American Sociological Review*, 44(4), 588-608.
- European Commission. (2023). *Road safety in the EU: fatalities below pre-pandemic levels but progress remains too slow* [Press release]. [https://ec.europa.eu/commission/presscorner/api/files/document/print/en/ip\\_23\\_953/IP\\_23\\_953\\_EN.pdf](https://ec.europa.eu/commission/presscorner/api/files/document/print/en/ip_23_953/IP_23_953_EN.pdf)
- Government Delegation for the National Plan on Drugs. (2022). *EDADES 2022. Encuesta sobre el alcohol y otras drogas en España (Survey on alcohol and other drugs in Spain)* (EDADES). [https://pnsd.sanidad.gob.es/profesionales/sistemasInformacion/sistemaInformacion/pdf/2022\\_Informe\\_EDADES.pdf](https://pnsd.sanidad.gob.es/profesionales/sistemasInformacion/sistemaInformacion/pdf/2022_Informe_EDADES.pdf)
- Eck, J. E., & Clarke, R. V. (2003). *Classifying Common Police Problems: A Routine Activity Theory Approach* In M. J. Smith and D. B. Cornish (Eds.), *Crime Prevention Studies: Vol. 16. Theory and Practice in Situational Crime Prevention* (pp. 7–39). Monsey, NY: Criminal Justice Press.
- Felson, M., & Clarke, R. V. (1998). *Opportunity Makes the Thief: Practical theory for crime prevention*. Home Office, Policing and Reducing Crime Unit, Research, Development and Statistics Directorate.
- State Prosecutor's Office. (2023). *Memoria de la Fiscalía General del Estado de 2023 (2023 Report of the State Prosecutor's Office)*. [https://www.fiscal.es/memorias/memoria2023/FISCALIA\\_SITE/recursos/pdf/capitulo\\_III/cap\\_III\\_5\\_4.pdf](https://www.fiscal.es/memorias/memoria2023/FISCALIA_SITE/recursos/pdf/capitulo_III/cap_III_5_4.pdf)
- Universidad of Valladolid General Foundation and National Observatory of Road Safety. (2022). *Estudio de prevalencia del consumo de sustancias psicoactivas en conductores de vehículos en España: EDAP 2021 (Prevalence study on the use of psychoactive substances in drivers of vehicles in Spain: EDAP 2021)*. DGT. [https://www.dgt.es/export/sites/web-DGT/galleries/downloads/conoce\\_la\\_dgt/que-hacemos/conocimiento-e-investigacion/EDAP-2021\\_Accesible-con-Meta.pdf](https://www.dgt.es/export/sites/web-DGT/galleries/downloads/conoce_la_dgt/que-hacemos/conocimiento-e-investigacion/EDAP-2021_Accesible-con-Meta.pdf)
- Gottfredson, M. R., & Hirschi, T. (1990). *A general theory of crime*. Stanford University Press.
- Hirschi, T. (1969). *Causes of delinquency*. New Brunswick: Transaction Publishers.

- Instituto Nacional de Toxicología y Ciencias Forenses (INTCF) (National Institute of Toxicology and Forensic Sciences (INTCF)). (2023). *Hallazgos toxicológicos en víctimas mortales de accidentes de tráfico (Toxicological findings in road traffic fatalities)*. 2022 Report. <https://www.mjusticia.gob.es/es/ElMinisterio/OrganismosMinisterio/Documents/HallazgosToxicologicosVictimasMortales2022%20%281%29.pdf>
- Marcos Ortiz, I. (2023). La incidencia del alcohol y otras drogas en la seguridad vial: un estudio criminológico en la ciudad de Santander durante 2020 (The impact of alcohol and other drugs on road safety: A criminological study in the city of Santander during 2020) [Doctoral thesis, University of Murcia]. Teseo.
- Spanish Observatory on Drugs and Addictions. (2020). *OEDA-Covid 2020 survey*. [https://pnsd.sanidad.gob.es/profesionales/sistemasInformacion/sistemaInformacion/Covid-19/20210326\\_Informe\\_ENCUESTA\\_OEDA-Covid\\_2020\\_def.pdf](https://pnsd.sanidad.gob.es/profesionales/sistemasInformacion/sistemaInformacion/Covid-19/20210326_Informe_ENCUESTA_OEDA-Covid_2020_def.pdf)
- World Health Organisation. (2018). *Global status report on road safety 2018*. <https://iris.who.int/bitstream/handle/10665/276462/9789241565684-eng.pdf?sequence=1>
- Redondo Illescas, S., & Garrido Genovés, V. (2023). *Principios de criminología (Principles of criminology)* (5th ed.). Tirant Lo Blanch.
- Redondo, S., Gonçalves, R. A., Nistal, J., Soler, C., Moreira, J. S., Andrade, J., & Andrés-Pueyo, A. (2020). Corrections and Crime in Spain and Portugal during the Covid-19 Pandemic: Impact, Prevention and Lessons for the Future. *Victims & Offenders*, 15(7-8), 1156-1185. <https://doi.org/10.1080/15564886.2020.1827108>
- Stickle, B., & Felson, M. (2020). Crime Rates in a Pandemic: the Largest Criminological Experiment in History. *American Journal of Criminal Justice*, 45(4), 525-536. <https://doi.org/10.1007/s12103-020-09546-0>
- Wortley, R., & Townsley, M. (2017). Environmental criminology and crime analysis: Situating the theory, analytic approach and application. In R. Wortley & M. Townsley (Eds.), *Environmental Criminology and Crime Analysis* (2nd ed., pp. 1–3). Taylor & Francis.

## LEGISLATION

- State Prosecutor's Office. (2019, 18 July). *Letter from the Public Prosecutor Coordinator to the judicial traffic police with instructions for the preparation of reports for offences of driving under the influence of toxic drugs, narcotics and psychotropic substances of Art. 379.2 of the Criminal Code*.
- Cantabrian Act 1/2002, of 26 February, on Commerce in Cantabria. *Official State Gazette*, 79, of 2 April 2002. <https://www.boe.es/buscar/pdf/2002/BOE-A-2002-6232-consolidado.pdf>.

Cantabrian Act 5/1997, of 6 October, on Prevention, Assistance and Social Inclusion in the Field of Drug Addictions. *Official State Gazette*, 283, of 26 November 1997. <https://www.boe.es/buscar/pdf/1997/BOE-A-1997-25123-consolidado.pdf>.

Organic Law 4/2015, of 30 March, on the protection of citizen security. *Official State Gazette*, 77, of 31 March 2015. <https://www.boe.es/buscar/pdf/2015/BOE-A-2015-3442-consolidado.pdf>

Royal Decree 1428/2003, of 21 November, approving the General Traffic Regulations for the application and development of the full text of the Act on traffic, circulation of motor vehicles and road safety, approved by Royal Legislative Decree 339/1990, of 2 March. *Official State Gazette*, 306, of 23 December 2003. <https://www.boe.es/buscar/pdf/2003/BOE-A-2003-23514-consolidado.pdf>







**Rocío Martín Ríos**

Prosecutor Attached to the Prosecutor's Office  
Road Safety of Andalucía, Ceuta and Melilla.

Provincial Prosecutor's Office of Seville.

PhD on Law from the University of Salamanca.

Master in Road Safety and Traffic

**CRIMES OF MANSLAUGHTER AND  
RECKLESS INJURY COMMITTED WITH A  
MOTOR VEHICLE OR MOPED**



## CRIMES OF MANSLAUGHTER AND RECKLESS INJURY COMMITTED WITH A MOTOR VEHICLE OR MOPED

**Summary:** INTRODUCTION 1 REGULATORY CONSIDERATION OF RECKLESS CONDUCT IN OFFENCES AGAINST ROAD SAFETY. 2 JURISPRUDENTIAL CONTRIBUTION TO THE DEFINITION OF RECKLESSNESS IN OFFENCES AGAINST ROAD SAFETY. CONCLUSIONS.

**Resumen:** La preocupación por reducir las altas tasas de siniestralidad en el ámbito de la seguridad vial motivó que el legislador penal pusiera el foco de atención en los siniestros con resultado de fallecimiento o lesiones ocasionados por conductas imprudentes cometidas con vehículo de motor o ciclomotores.

A través de un análisis crítico de las sucesivas reformas a que se sometió el Código Penal en lo relativo a los delitos imprudentes cometidos en dicho ámbito se pretende ofrecer criterios orientativos para identificar las conductas que pueden considerarse efectuadas mediante negligencia grave o menos grave y cuáles, por ser catalogadas como imprudencia leve, quedan excluidas del reproche penal y han de buscar respuesta en la jurisdicción civil.

A tal fin, se tendrán en cuenta las aportaciones doctrinales y jurisprudenciales que han ido acompañando al aplicador de la norma en la interpretación de dichas reformas.

**Abstract:** The concern about reducing the high accident rates in the field of road safety prompted the criminal legislator to focus on accidents resulting in death or injuries caused by reckless behavior committed with motor vehicles or mopeds.

Through a critical analysis of the successive reforms made to the Penal Code regarding reckless crimes committed in this area, it is intended to provide guiding criteria to identify behaviors that can be considered as carried out through gross negligence or less severe negligence, and which, being categorized as slight recklessness, are exempt from criminal reproach and must seek redress in the civil jurisdiction.

To this end, doctrinal and jurisprudential contributions that have accompanied the applicator of the standard in interpreting these reforms will be taken into account.

**Palabras clave:** Imprudencia, deber de cuidado, peligro, riesgo, seguridad vial.

**Key words:** Negligence, duty of care, danger, risk, road safety.

## INTRODUCTION

The technical and scientific progress made means that over the last century society has experienced unquestionable benefits in terms of general well-being, while situations have been created that may pose a risk to citizens. This has led to the need for criminal law to intervene to control, insofar as possible and always on the basis of the principle of minimum intervention, conduct that could lead to such situations.

An example of this is in the area of road safety. The increase in the number of journeys made using motor vehicle has led to a worrying situation as regards the number and severity of road accidents. In most cases, the human element was at the root of the problem, which is why the problem had to be tackled from all angles and, of course, from a criminal perspective. Legislators, aware of this reality and with a view to curbing both the number of road accidents and their consequences, specifically penalise reckless conduct committed with a motor vehicle or moped resulting in death or injury.

The commendable intention of legislators was clouded by the opacity of the regulation since, despite the fact that the criminal text has been amended several times, it is very difficult to understand in which recklessness should be considered serious, less serious or minor. The question is by no means trivial in view of the difference not only in procedural but also in criminal treatment.

In recent years, attempts have been made to give regulatory content to the cases that would fit within the scope of the offences of reckless manslaughter and injury committed by motor vehicle or moped as a breach of the rule of care, although none of the reforms made have been very well received by legal operators given the difficulty of understanding them. Although none of the reforms is completely satisfactory, the desire to shape this figure must nevertheless be acknowledged.

The aim of this paper is to shed light on the criteria to be taken into account in order to fit the conducts into each of the types of recklessness.

## 1 REGULATORY CONFIGURATION OF RECKLESS CONDUCT IN ROAD SAFETY OFFENCES

### 1.1 THE REFORM BROUGHT ABOUT BY ORGANIC LAW 1/2015 OF 30 MARCH 2015

To understand the current regulation of recklessness and the punitive line set by the legislator, it is essential to have an understanding of the previous reforms that explore this matter. From 2014 onwards, the downward trend seen in previous years was reversed and the number of road traffic fatalities started to increase again. This led to a criminal approach to recklessness with a view to avoiding an upward trend, leaving aside other aspects of everyday life where careless behaviour was also the source of many harmful results (e.g. in the health or food sector).

Organic Law 1/2015, of 30 March, amending Organic Law 10/1995, of 23 November, of the Criminal Code (hereinafter, LO 1/2015) offered, in Arts. 142 and 152 CC, a new approach to reckless manslaughter and injuries, introducing the following new developments with respect to the previous regulation: it classified criminal offences into serious, less serious and minor offences<sup>1</sup>, eliminating the category of misdemeanours (and, with this, the title relating to them); secondly, it decriminalised manslaughter and injuries caused by minor recklessness. And finally, it introduced less serious recklessness.

Specifically, in relation to the crime of reckless manslaughter (art. 142.2 CP), less serious reckless manslaughter was categorised, becoming a minor offence in consideration of the length of the penalty (Art. 13.4. CC<sup>2</sup> in relation to Art. 33 CC); it established the penalty of deprivation of the right to drive motor vehicles and mopeds on an optional basis when the manslaughter was caused by the use of a motor vehicle or moped. It also constituted the offence as a semi-public offence (requiring a report being filed by the victim or their legal representative for its prosecution). This meant that forgiveness on the part of the victim *ex Art. 130.1.5 CC* extinguished criminal liability.

In turn, the crime of reckless injury (Art. 152.1 CC) was subject to the following changes: when the injuries were caused by serious recklessness, a fine was contemplated as an alternative to imprisonment; the injuries provided for in Art. 147.1 CC committed through less serious recklessness were excluded; the injuries established in Arts. 149 and 150 CC committed with less serious recklessness became a minor offence in terms of the penalty (fine of 3 to 12 months); the penalty of deprivation of the right to drive when the injuries were caused using a motor vehicle or moped committed with less serious recklessness became optional; for the initiation of proceedings (i.e. as a requirement for prosecution), the victim or their legal representative was required to file a report, which,

---

<sup>1</sup> As per the classification in Art. 13 CC.

<sup>2</sup> Art. 13.4 CC: "Where the penalty, by virtue of its extent, may be included among those referred to in the first two paragraphs of this Article, the offence shall in any case be deemed a serious offence. Where the penalty, by virtue of its extent, can be regarded as either minor and less serious, the offence shall in any case be regarded as minor". Art. 33 CC classifies penalties as serious, less serious or minor depending on their nature and extent.

as in the case of manslaughter, made it possible for the victim to forgive the offender to extinguish criminal liability (Art.130.1.5 CC).

### 1.1.1 The origin of the reform

The main innovations in the reform made under Organic Law 1/15 were the creation of less serious recklessness (a previously unknown concept) and the decriminalisation of minor recklessness. This meant that the injuries under Art. 147 CC committed by minor recklessness (former misdemeanour under Art. 621.3 CC) and manslaughter also caused by minor recklessness (included in the former Art. 621.2 CC) were criminally atypical.

The elimination of misdemeanours was based on the Explanatory Memorandum of Organic Law 1/2015 on the principle of minimum intervention in criminal law, limiting the punitive rebuke to “serious cases of recklessness”. Cases involving minor recklessness would therefore be limited to civil law.

However, this referral to civil jurisdiction was not well received by victims’ associations and a wide sector of both the doctrine and legal operators. It also eliminated the intervention of the Public Prosecutor's Office (hereinafter, PPO) in the proceedings, despite the fact that the most important legal assets were at stake: life and physical integrity. In fact, for De Vicente Martínez (2017), “it is probably the most debatable decision that has been taken regarding the decriminalisation of misdemeanours”. Secondly, it was indisputable that citizens deciding to take legal action were required to assume outlays not contemplated in criminal jurisdiction, as their involvement required defence by a lawyer and representation through a solicitor. This prompted, mainly, victims’ associations to raise their voices against the reform, suspecting that the only ones to benefit from it would be the insurers. According to De Vicente Martínez (2017, p.5), the disadvantages for citizens would result in a significant decrease in the number of claims originating outside road accidents, as citizens would refuse to file legal action in a slow and costly jurisdiction.

On the other hand, authors including Cuello Contreras and Mapelli Caffarena (2015) consider that the decriminalisation of minor recklessness was not a direct motivation of the legislator, but rather a collateral effect of the main consequence sought by the legislator: the elimination of Book III of the Criminal Code, on Misdemeanours.

Organic Law 1/2015 aimed to justify the elimination of minor recklessness from the criminal acquis through the Explanatory Memorandum of Organic Law 1/2015, alluding to the fact that the new regulation would allow a “better graduation of criminal liability depending on the conduct deserving of reproach while, at the same time, allowing for the recognition of cases of minor recklessness that should remain outside the realm of criminal law”. Through the second clause, it admitted the existence of cases that would receive a criminal response even when there is a minor breach of the duty of care.

### 1.1.2 Incorporation of less serious recklessness

One of the main innovations introduced by Organic Law 1/2015 was, therefore, the introduction of an intermediate figure between serious and minor recklessness: less serious recklessness, which could only be appreciated in cases of manslaughter and injury under Articles 149 and 150 CC, and was excluded in injuries under Article 147.1 CC.

Given that the institution was born without specific content, doctrine and case law have been called upon by the need to make a conceptual definition that would make it possible to establish the cases to be included in one category or another.

Authors such as Delgado Sancho (2017) anticipated the interpretative problems that establishing the limits of the serious/less serious recklessness would entail. Thus, despite already being (on many occasions) difficult to distinguish between serious and minor recklessness, the introduction of the new category, which is even more similar to serious recklessness, adds a new layer of difficulty.

Some considered that this was a “terminological” modification in which the legislator only substituted the expression “minor recklessness” with “less serious recklessness” (Ramón Ribas (2015)), so that “minor recklessness” would remain in the CC after the reform.

In Opinion 2/2016 on Organic Law 1/2015 of 30 March 2015 amending the Criminal Code (hereinafter, Opinion 2/2016), the Public Prosecutor's Office for Road Safety Coordination (hereinafter, FSCSV) pointed out three reasons why such a comparison should not be made:

1. paragraph 31 of Explanatory Memorandum distinguishes them,
2. there are grammatical differences, as “less serious” recklessness entails a comparative analysis that distances it from minor recklessness,
3. the penalties provided for minor offences under arts. 142.2 and 152.2 are higher than those established for the former misdemeanours included in art. 621.1 and 3, with their correlative impact “on the statute of limitations for the offence and penalty of arts. 131.1 and 133.1 and in the cancellation of art. 136.1 c)”, which is why “it cannot be considered that the greater punitive response does not go hand in hand with a greater disvalue of the punishable conduct”.

A second thesis considers that less serious recklessness partially comprises minor recklessness, accounting for the most serious cases of minor recklessness. In this way, they argue, minor recklessness does not fall outside the criminal framework and very minor conduct is handled as part of civil proceedings, respecting the *ultima ratio* of criminal law.

For Galán Cáceres (2017), it is possible that conduct prior to the reform considered minor (the former misdemeanours) will end up being taken to the realm of less serious recklessness in order to ensure the right to compensation for victims and also “to prevent conduct causing serious results from going unpunished”.

As a criticism of this possibility, we believe that the new minor offence of manslaughter and injuries due to less serious recklessness would have the minimum penalty typical of a minor offence, but by having a maximum penalty of 18 months' fine for manslaughter and 12 months' fine for injuries, a higher amount was envisaged than contemplated for the former minor offences, imposing penalties that, in reality, were typical of less serious offences.



Specifically in order to prevent minor recklessness from suffering a criminally disproportionate punishment, a minimum penalty was set which was included in the range of minor offences so that, *ex art.* 13.4 PC, it would retain this nature.

The advantages of this conception are, on the one hand, that the increase in the penalty for this type of case is in line with the approach that it covers the most serious cases of minor recklessness and, on the other hand, that it eliminates the possibility of bringing cases of very slight recklessness before the criminal courts and avoids the disqualification of cases of careless conduct of a certain level.

Others consider that less serious recklessness covers minor conduct involving serious recklessness. In this way, the punishment for the most minor offences is reduced in terms of seriousness and they are punished as minor offences.

As a criticism, we must point out that they overlook the the main aim of the reform (as can be deduced from the Explanatory Memorandum), which was not to punish lesser forms of serious recklessness with lesser penalties, but to avoid the disqualification of the most serious conducts within the minor ones. The criticism of the previous thesis that there had been a punitive increase in relation to former misdemeanours, is used by advocates of this theory to turn it into an argument in their favour.

In our view, less serious recklessness constitutes a new conceptual category. It differs from gross recklessness in the intensity of the duty of care, which means that the seriousness of the breach of the duty of care that would constitute gross recklessness is reduced. To determine such a categorisation, a case-by-case analysis is required.

The reform places the infringement of the administrative rule as the starting point for determining the seriousness of the recklessness committed. In spite of this, there has been no shortage of judicial bodies that have continued to use the criterion of the infringement of the administrative rule as an essential criteria for weighing recklessness<sup>3</sup>.

Opinion 2/2016 determined that, in order to assess the extent of the carelessness, attention should be paid to the elementary nature of the duty of care breached, “essential to safeguarding road safety”. To this end, both the serious or very serious nature of the infringements had to be taken into account (Arts. 76 and 77 Royal Legislative Decree 6/2015, of 30 October, approving the consolidated text of the Law on Traffic, Circulation of Motor Vehicles and Road Safety (hereinafter, LSV) as the nature of the risks created for the legal assets of all users “taking into account the traffic of density and the number of potentially affected persons”.

The Opinion, aware of the need to avoid automatisms, encourages a case-by-case analysis. Even so, it offered some guidance on how to distinguish between serious and less serious recklessness. Its Conclusion 11 included the manoeuvres in which serious recklessness could be considered due to the seriousness of the rule of care infringed, while its Conclusion 12 contemplated the conduct that could be considered as serious

---

<sup>3</sup> An example of this can be found in Order 619/2016, of 15 September of the Alicante Provincial Court (First Section), which establishes the nature of the administrative rule infringed as a criteria for delimiting the seriousness of the recklessness.

recklessness as they affect the regulatory duty of care of the LSV that affect the basic conditions of road safety, the elementary rules for risk-free driving and which are associated with the serious or very serious infringements foreseen in Arts. 76 and 77 LSV.

Opinion 2/2016, in an educational manner, equates serious recklessness to the violation of elementary rules of caution or duties of care required of any person; less serious recklessness to the violation of rules of care respected by the average citizen; and slight recklessness to the omission of duties of limited relevance. It does not confuse serious infringement with gross recklessness, but rather weights it according to the breach of the duty of care. There are behaviours that constitute serious or very serious offences according to the LSV and that leave no doubt as to their serious recklessness given the nature of the breach of the duty of care, such as reversing on a motorway. However, if a vehicle was reversed down an urban road with no direct danger to third parties, the conduct could be considered less serious.

This being so, the breach of the administrative rule aimed at controlling the risk of traffic offers indications that a standard of care has been infringed, but the administrative rule cannot be equated with the duty of care. Thus, a breach of the duty of care does not always occur when there is a serious infringement of the LSV. In this sense, Daunis Rodríguez (2018, p. 18) is in favour of linking the seriousness of the recklessness to “the intensity or seriousness of the breach of the duty of care and not the seriousness of the administrative offence”. Rueda Martín (2009) agrees.

Therefore, in order to determine whether the agent engaged in reckless conduct, we cannot only look at the infringement of the administrative rule, but also at the endangering or damaging of the protected legal asset, as the situation may arise in which an administrative rule is infringed but does not involve an action that is not altogether prudent from a criminal point of view, as no asset has been endangered. And vice versa. However, as we shall see, subsequent reforms have tended to use the seriousness of the offence as a criteria for classifying recklessness.

As Traperó Barreales (2019) warns, conduct consisting of the omission of essential rules of care would exclude the possibility of less serious recklessness as they should be considered as serious (provided that there is a causal link with the result produced), and the same would happen when the lack of attention is minimal, because this would constitute minor recklessness rather than less serious recklessness.

Daunis Rodríguez (2018, pp. 39-40) proposes a formula for distinguishing between serious recklessness and less serious recklessness: recklessness deriving from mere absent-mindedness or lack of due attention would constitute minor recklessness, which would be excluded from criminal proceedings; cases in which the diligence required of an average person is omitted would constitute the intermediate form of recklessness and, when there is a serious attack on the standard of care, this should be considered serious. In any case, we add, it would always be necessary to analyse the case in hand to assess the breach of the rule, the breach of the duty of care and the causal relationship with the result, without any merely a priori criteria being possible for the classification.

## 1.2 THE REFORM BROUGHT ABOUT BY ORGANIC LAW 2/2019 OF 1 MARCH 2019

### 1.2.1 The new regulation of recklessness

Organic Law 2/2019, of 1 March, amending Organic Law 10/1995, of 23 November, of the Criminal Code, on reckless driving of motor vehicles or mopeds and penalties for leaving the scene of an accident (hereinafter, Organic Law 2/2019) amended certain aspects with respect to the regulation made in 2015.

In relation to the crime of manslaughter, it introduced a hypothesis *ope legis*: driving in which the concurrence of some of the circumstances foreseen in Art. 379 CP (excessive speed, driving under the influence of alcohol and/or drugs or exceeding the legal limits) determined the production of the fact would be considered serious recklessness. In turn, Art. 142.2 CC, in relation to cases of less serious negligent manslaughter, added a new factor, establishing a criteria to determine when recklessness would be considered less serious, suggesting that recklessness that is not serious and in which there is a serious breach of traffic regulations, provided that said breach is the cause of the fact, should be considered less serious. In any case, it indicates that this would be “subject to assessment” by the court authority.

Furthermore, less serious negligent manslaughter could only be prosecuted following “a complaint by the injured party or their legal representative”, bestowing upon it the nature of a semi-public offence.

Through Art. 142 bis CC, lawmakers incorporate two aggravated categories for the cases of Art. 142.1 (manslaughter caused by gross recklessness), providing for the penalty to be increased by one or two degrees if two or more people have died or the death of one person and the others have suffered injuries pursuant to Art. 152.1. 2 or 3, and the possibility of imposing the penalty two degrees higher in case of multiple deaths.

With regard to the offence of causing injury, it is presumed that serious recklessness would be considered as cases of driving in which any of the circumstances foreseen in Art. 379 CC occur and cause the production of the fact. This is punished when the less serious recklessness causes injuries that require medical or surgical treatment in addition to initial medical assistance (Art. 147.1 CC) and, lastly, it considers less serious recklessness using the same formula used for manslaughter.

Similarly, the procedure can only be initiated when a complaint is filed by the aggrieved party or their legal representative.

Finally, it introduces into Article 152 bis CC a specific offence equivalent to Article 142 bis for injuries in identical terms to the provisions in the case of manslaughter.

### 1.2.2 The origin of the reform

The Preamble of the Organic Law bases the reform on the “increase in accidents” (road accidents) caused by the use of motor vehicles or mopeds in recent years involving pedestrians and cyclists as victims. This gave rise, according to the Preamble, to a “significant social demand”, mainly on the part of these groups considered to be

vulnerable. There has been no shortage of criticism of this justification, on the grounds that the root of the reform lies not so much in the objective increase in figures as in the “media impact” of certain accidents in which the victims were pedestrians and cyclists. The critical core includes Lanzarote Martínez (2019, p 2 et seq.). Indeed, the regulatory review was triggered by a campaign launched by the widow of a cyclist hit by a hit-and-run lorry driver<sup>4</sup>. On the other hand, in absolute terms, there was no increase in the number of accidents, rather the decrease in the number of crashes meant that, within the total number of casualties, vulnerable victims increased as a percentage of the total number of casualties.

The 2019 reform gave a criminal response to those who urged that the cases causing injuries under Art. 147 1 CC committed involving less serious recklessness would receive a response *ius puniendi*. Despite this, it was criticised for leaving conduct involving minor recklessness outside the scope of criminal law, forcing the victim to go to civil court to pursue their interests.

In our opinion, lawmakers missed the opportunity to raise the penalty for manslaughter caused by gross recklessness. The limited maximum penalty that could be imposed for the offence (4 years) means the preventive purposes (both special and general) pursued go unfulfilled. On the one hand, this is because it is rare that people will be imprisoned for a crime of this nature and, on the other hand, it creates an image in society that the punishment attached to the crime is not particularly severe.

### 1.2.3 The definition of serious and less serious recklessness

The 2019 reform was intended to facilitate an understanding of what should be considered serious recklessness, presuming that it would be “in any case” when any of the circumstances contemplated in Art. 379 CC were present and this was a determining factor in the production of the fact. It does not act as a *numerus clausus*, as there may be other cases of driving in which the breach of an essential standard of care gives rise to a serious risk resulting in a serious outcome (manslaughter or injury) and constitutes gross recklessness. This consideration is supported not only by the fact that the legislator mentions that this is considered “in any case”, without ruling out other possibilities, but also by the fact that less serious recklessness will be so when “it is not qualified as serious”. Frías Martínez (2019) is in favour of this consideration. In the opinion of Rodríguez Lainz (2019, p.9) a very serious administrative offence could lead to serious or less serious recklessness, just as serious offences can lead to less serious recklessness.

The expression “shall in any case be considered as serious recklessness” has been criticised for applying a formula of automatic interpretation in which whenever one of the circumstances of Art. 379 CC is present, the recklessness must be considered as serious. An attempt was made to mitigate the harmful effect of the presumption *iuris et de iure* by specifying that it would also be required to “determine the production of the fact”. Thus, a causal link between the infringement of the rule and the result was required.

---

<sup>4</sup> The widow, Anna González, collected 200,000 signatures under the campaign “For a fair law” with a view to amending the Criminal Code to protect this vulnerable group and prevent “deaths like that of her husband” from going unpunished.

The existence or absence of the causal link was decided at the discretion of the court authority.

Therefore, it was not in all cases in which one of the conducts of Art. 379 PC was committed and an injury was caused, that serious recklessness should be assessed *ope legis*, as a causal link must be established between the seriousness of the breach of the duty of care and the result of manslaughter or injury. And this is despite the restrictive formula “in any case”, because otherwise an accident could be classified as having been committed due to gross recklessness for falling within the type of art. 379 CC when the cause of the accident could be found, for example, in a distraction at the wheel caused by the use of a mobile phone.

Case law has reached a consensus in relation to the consideration that the determining factor for the degree of recklessness is not the result produced, but the transcendence or intensity of the duty of care infringed, based on the requirement that has to be asked of an average person (Roig Torres, 2022, p. 89).

Less serious recklessness was defined by Organic Law 2/2019 in Arts. 142.2 point two of the second paragraph and Art. 152.2 point two of the second paragraph, for cases of manslaughter and injury, respectively. The wording was imprecise, defining less serious as whatever was not a serious infringement of administrative road rules. However, the appreciation of the facts was left to the discretion of the judge.

If in relation to serious recklessness we concluded that the reference to Art. 379 could not be understood as a closed list (“shall be considered in any case”, leaving other avenues open), the Explanatory Memorandum of Organic Law 2/2019 seems, on this occasion, to provide a closed catalogue in relation to the assumptions that can be included in the less serious offence. Thus, the Explanatory Memorandum refers to an “authentic interpretation” of less serious recklessness, which should be considered binding. This seems to be the conclusion reached by the expression “shall be regarded as less serious recklessness (...) provided that the act is the consequence of a serious offence”, as this is only the case when the perpetrator commits a serious traffic offence.

A contextual interpretation of this expression would lead to the immediate application of at least less serious recklessness whenever there is a serious traffic offence. The legislator qualifies this presumption and makes it even more cumbersome with the clause “the judge or court shall assess the seriousness of the recklessness”, as it once again grants the court authority the power to assess the seriousness of the recklessness. As a result, the judge could assess the conduct as serious, less serious or minor, after analysing the infringement of the standard of care and the causal relationship with the harmful result. In line with the opinion of Roig Torres (2023), it does not seem that the legislator advocated this solution when introducing the authentic interpretation of less serious recklessness.

In our view, it is not always the case that where there is a very serious or serious infringement, the recklessness should systematically be considered as at least minor. The administrative traffic regulations classify offences as very serious, serious and minor and, although it is true that the classification of offences can serve as a benchmark for the determination of recklessness as regards the determination of the infringement of the duty of due care (in such a way that very serious offences could constitute serious recklessness

and very serious or serious offences would correspond to less serious recklessness), this is insufficient, especially when not all offences that are classified as serious constitute reckless driving, as they do not increase the risk of driving. There is therefore a disconnection between conduct classified as serious and the definition of less serious recklessness in the CC. The specific circumstances of the injury or manslaughter must be assessed, not only whether or not the rule regulating the activity that caused the harmful result was breached. And this assessment will lie with the judge, in accordance with the letter of the law (“the judge or court shall assess the nature of the case”).

In fact, when Art. 76 states that “these are serious offences, when they do not constitute a crime”, we can conclude that the LSV itself assumes that there may be conduct that is administratively reproachable in a serious way but which does not merit criminal reproach, either because the offence did not cause the accident or because it is not considered a major breach of the duty of care.

We have seen that the LSV makes a threefold classification of infringements: very serious, serious and minor. Although the CC only mentions serious offences, the fact is that, in line with what has already been indicated, not all serious offences give rise to serious recklessness, nor can a minor offence exclude the possibility of less serious recklessness being applied. If, for example, the driver is unfit to drive the vehicle because they are unwell or drowsy, but nevertheless decide to drive, this could lead to injury caused by inattention while driving. This would be a minor offence which could lead to less serious or serious recklessness. In fact, Supreme Court Ruling 1491/1982 of 27 November 1982 (ECLI:ES:TS:1982:609) already considered that the conduct of a person who drove under the effects of medicine whose side effect was drowsiness and, as a result, fell asleep at the wheel, causing an accident that resulted in several fatalities, constituted gross recklessness or recklessness.

Magro Servet (2019, pp.4-7) takes the opposite view, considering that the reference to administrative regulations implies that in those cases in which a serious administrative offence is committed in the field of road safety, according to the new regulation of Arts. 142.2 and 152.2 PC, it should be considered as less serious recklessness.

For Aguado López (2019), one of the main criteria for defining the degree of recklessness is the foreseeability of the result, so that the more foreseeable the result, the more serious the recklessness.

On the other hand, we cannot detract from the introductions made by the reform that are worth praise. This includes the punishment of the injuries foreseen in Art. 147.1 CC that were committed involving less serious recklessness.

### 1.3 THE REFORM BROUGHT ABOUT BY ORGANIC LAW 11/2022 OF 13 SEPTEMBER

#### 1.3.1 The new regulation of recklessness

In a single article, Organic Law 11/2022, of 13 September, modifying the Criminal Code regarding reckless driving of motor vehicles or mopeds (hereinafter, Organic Law 11/2022) reformed art. 142 and 152 CC introducing the following new features: added to



the definition of manslaughter due to less serious recklessness the legal presumption “in any case” when the requirements already established by the provision are met, as well as that it would be up to the judge to reasonably assess the existence of the causal relationship between the breach of the duty of care and the occurrence of the event; converted less serious reckless manslaughter into semi-public; modified Art. 152.2 paragraphs one and two, sanctioning anyone who, through less serious recklessness, causes injuries under Art. 147.1, increasing the penalty for the injuries referred to in Arts. 149 and 150 and introduced the same presumption with regard to injury for the assessment of less serious recklessness as for manslaughter.

Once again, the approach to recklessness taken by Organic Law 11/2022 is limited to the field of recklessness committed through the use of a motor vehicle or moped.

### 1.3.2 Justification of the so-called “cycling law”.

The cycling community was not considered sufficiently protected under Organic Law 2/2019, which is why the Spanish Cycling Association demanded a new reform to “avoid the loopholes in the law that allow less serious recklessness to be archived when injuries or death occur after the commission of an offence classified as “serious” in the LSV, and which, “as a matter of routine, the courts consider “minor” and therefore do not generate criminal liability, using the power given to them by the law with this wording”.

The truth is that, despite the continuous legislative will to protect the victims of road crimes, the modifications introduced by Organic Law 1/2015 and Organic Law 2/2019 led to proceedings being shelved when the conduct was judicially classified as minor recklessness, even when injuries or even death were caused. This obliged victims to resort to civil jurisdiction, which led to strong criticism, as we have seen, both from a doctrinal sector and from road safety victims' associations.

However, the Preamble insists, it is not intended to reduce the courts' powers to determining whether there was recklessness, whether there was a serious administrative infringement of traffic regulations or whether there was a “causal link between the reckless act and the result of death or relevant injuries”. These words were used to justify the introduction of new formulas which, without eliminating the judge's assessment with regard to the assessment of recklessness, would facilitate the assessment of less serious or serious recklessness if a serious infringement of the LSV was committed.<sup>5</sup>

Organic Law 11/2022 aims to remove the option of judges deeming that there has been minor recklessness in cases where there is a serious infringement of traffic rules and there is a significant harmful result (death or injury). However, Roig Torres (2023) considers the regulation confusing. First of all, it seems to establish *ope legis* that if the judge or court decides that the motor vehicle or moped was driven recklessly, resulting in a serious infringement of traffic regulations (art. 76 of the LSV) resulting in death or significant injuries, the recklessness must be classified at least as less serious, but never as minor. However, it includes the clause “...the assessment of whether or not the

---

<sup>5</sup> In the final text, the content of the initial Explanatory Memorandum was watered down, in which it was stated that there was an automatic referral by judges of cases to civil jurisdiction despite the existence of indications of a crime. In this regard, Roig Torres (2023, p. 178).



determination exists must be made in a reasoned decision”, which means that the judge or court must not only decide on the seriousness of the offence or the type of recklessness, but also establish a causal link between the serious infringement of traffic law and the result of death or injury. Moreover, this causal link must be established by means of a reasoned decision in order for it to be considered an objective offence, so as not to exclude such conduct from criminal proceedings.

For the Spanish Cycling Association, the wording still leaves loopholes through which, even if there was a serious infringement of traffic rules and the conduct resulted in death or injury, could lead to proceedings being closed under the judicial power to classify the conduct as minor.

### 1.3.3 The definition of serious and less serious recklessness

The hypotheses established by Organic Law 2/2019 to define serious and less serious recklessness by means of a reference to the offences of the LSV were criticised for being perceived as limiting the jurisdictional power to define the degrees of recklessness. This meant that the courts gradually qualified the legal provision by recognising the judge's power to identify the degree of recklessness, so that not every time an injury was produced as a result of a serious administrative offence, should it necessarily be related to serious recklessness. However, if a serious offence was committed and the judge classified it as minor recklessness, he had to give reasoned and sufficient reasons for this<sup>6</sup>.

Organic Law 11/2022, aimed to make progress in the fight against the automatism in which, according to the different associations, the courts were incurring by applying minor recklessness and, through the arts. 142.2 and 152.2 introduced, the presumption *iuris et de iure* that went beyond the jurisprudential trend that empowered the judge to assess slight recklessness. On the basis of this hypothesis, when the injuries resulting from a road accident are fatal or serious injuries and a serious infringement of road regulations had been observed, judges or courts were unable to consider the recklessness as minor. In this way, as Roig Torres (2023, p.166) observes, “they converted the formula introduced by Organic Law 2/2019 into a presumption *iuris et de iure*”.

The new features of the current regulation compared to the previous regulation of 2019 focus on the definition of less serious recklessness with respect to serious recklessness through Arts. 142.2 and 152.2 CC, the aim of this amendment is that, in all cases in which a serious harmful result is caused and a serious offence occurs, the assessment of recklessness in its lesser degree, that is, minor, is not possible.

However, it misses the opportunity to provide a clear regulation that clarifies the distinction between serious and less serious recklessness and instead presents a text that is difficult to understand. On the one hand, it establishes a presumption *ope legis* and then indicates in the final paragraph that the assessment of the “existence or not of the determination must be made as part of a reasoned decision”, which only refers to the causal link between the breach of the duty of care and the result, not to the fact that it is up to the judge to determine whether the recklessness is serious, less serious or minor. This is because the first part of the precept made it clear that minor recklessness was ruled

---

<sup>6</sup> See Plenary Supreme Court Ruling 421/2020 of 22 July (ECLI:ES:2020:2533).

out when there was a serious breach of the road safety rule. In the words of Roig Torres (2026, p.186) “there is a lack of such a motivation also required with regard to the level of serious or less serious recklessness”, referring exclusively to the judgement of causality and not to the nature of the carelessness “which requires greater justification because it depends on the subjective assessment of the judge on the basis of objective data”.

The main criticism is that the focus is no longer on the breach of the duty of care and the seriousness of the resulting risk, but on the administrative rules. Non-compliance with the administrative rule will be the prevailing criteria for the criminal qualification of the conduct, in such a way that, if the rule breached is classified as very serious or serious, the conduct will receive the punishment of *ius puniendi* by the State, provided that the judgement of causality is appropriately established by the court. However, such an offence cannot be considered a minor offence.

In cases such as disregarding road signs or right of way, if this leads to an accident resulting in a serious injury, this will give rise to the offence of reckless manslaughter or injury if, in accordance with Arts. 142 and 152 PC, the nexus of causality was established, depriving the judge of the ability to assess the other concurrent circumstances.

The motivation behind the most recent wording is none other than to prevent the victims of serious accidents from being forced to resort to civil proceedings, with all the economic and time disadvantages indicated above.

The fact that the reform is so recent, however, prevents us from knowing how it will ultimately be applied by the courts. They may refrain from employing a literal interpretation of the rule and assess the concurrent circumstances, not appreciating an offence even if the conduct would constitute a serious administrative offence in cases where the recklessness associated with it is considered to be minor.

For Rodríguez Lainz (2022), the emphasis must be placed on the decisive nature of the causal relationship between the infringement and the harm caused, since not only must it exist, but it must also be relevant. In their view, this determination is as an element of the offence. However, he warns, the judge is given a moderating capacity by subjecting the relevant nature of the breach in the production of the harm to his criteria. In this regard, he states: “This same power of weighing the administrative infringement as a determining factor of the harm would make it easier to take into account the nature of the infringement, as established in the rule that is being amended”.

Magro Servet (2022) stresses the idea that the difference between serious and less serious recklessness lies in the intensity of the breach of the duty of care, in such a way that it would be considered serious when there is a “more intolerable neglect of the factual conduct that the perpetrator must control”, causing a risk that leads to a harmful result.

Following the latest reform in relation to harm caused by under Organic Law 11/2022, the FSCSV issued the following Opinion 1/2023 on the reform introduced by Organic Law 11/2022, of 13 September, amending the Criminal Code in the area of reckless driving of motor vehicles or mopeds (hereinafter, Opinion 1/2023), with a view, amongst other issues, to clarifying the concept of less serious recklessness.

The new wording, according to the Opinion, aims to limit the judge's discretion, as in the previous wording, by eliminating the expression "once the judge or court has assessed its seriousness" and including the formula "in any case" ("shall be considered, in any case, as less serious recklessness").

For the purposes of this study, the Opinion emphasises the provisions of the previous opinions 2/2016 and 1/2021, the need to avoid automatism and make case-by-case assessments for the classification of recklessness.

It concludes that whenever there is harm caused with a motor vehicle or moped in which there has been a serious infringement of traffic rules and an objective allocation of the result is made, the recklessness must be considered at least as less serious. Thus, the infringement of the serious administrative rule will act as an indication of the seriousness of the recklessness.

However, if the result caused by the conduct was not objectively foreseeable or would have occurred even with a negligent attitude, strict liability would have to be denied. On the other hand, if the elements of objective allocation are present and the infringement of the serious rule was decisive in the production of the result, the recklessness must be assessed at least as less serious.

## **2 JURISPRUDENTIAL CONTRIBUTION TO THE DEFINITION OF RECKLESSNESS IN OFFENCES AGAINST ROAD SAFETY**

One of the most difficult and controversial issues in the field of recklessness in the framework of road safety is to establish which conducts would be included in serious recklessness and which in less serious recklessness, due to the changes made to criminal law in recent times (three modifications in seven years).

Despite the fact that criminal law has tried to establish objective criteria to classify the breach of the duty of care and to limit the jurisdictional power in this task<sup>7</sup>, successive reforms have left such a wide margin of discretion that it contradicted the intended objectivity and continued to leave to the decision about the degree of recklessness to the judge's discretion. In this context, the case law of the Supreme Court has been fundamental in setting the parameters for defining both figures.

The first time the High Court ruled on less serious recklessness was in Supreme Court Ruling 805/2017, of 11 December (ECLI:EN:TS:2017:4867), on the "Madrid Arena case", where it concluded that recklessness is a criminal concept, not an administrative one.

Plenary Supreme Court Ruling 421/2020 of 22 July (ECLI:ES:TS: 2020:2533) was issued for the unification of doctrine in matters of recklessness in road traffic. To distinguish serious recklessness and less serious recklessness, it followed the line marked by the aforementioned Supreme Court Ruling 805/2017, of 11 December (ECLI:ES:TS:2017:4867), which in turn followed in the wake of Opinion 2/2016. It defines less serious recklessness as that which gives rise to a lesser risk than serious

---

<sup>7</sup> In line with the doctrinal and jurisprudential line in recent years, in favour of objective allocation.

recklessness, in which there is a “breach of the average duty of foresight in the activity of the agent in the conduct corresponding to the conduct in question” and which is in a causal relationship with the harm caused. Gross recklessness is described as “the omission of the most intolerable care”, through an action or omission that results in harm.

The Supreme Court Ruling 945/22 of 12 December (ECLI:ES:TS:2022:4627) states that the incurrance in a serious infringement of the LSV, when it was decisive in producing the damage, is a solid indication that less serious recklessness was committed. It warns that there can be no automatism, since the same offence, depending on the other concurrent circumstances, may give rise to the three types of recklessness (serious, less serious and atypical minor). Thus, citing Supreme Court Ruling 284/2021, of 30 March<sup>8</sup>(ECLI:TS:2021:1159), which in turn cites Supreme Court Ruling 421/2020, of 22 July (ECLI:ES:TS:2020:2533), it is recalled that the 2019 reform sought to clarify the differentiation by focussing on a serious traffic offence, but such an offence can give rise to the three types of recklessness depending on the “magnitude of the breach of the duty of care”.

Supreme Court Ruling 284/2021, of 30 March (ECLI TS:2021:1159) considered that lawmakers in 2019, by referring to the conducts in Art. 379, established a presumption of serious recklessness that is “exhaustive”, but not exclusive. It is “exhaustive” in the sense that whenever these cases occur and a result deriving from the risk in question is produced, the recklessness will be serious, except in the case that the serious infringement of the standard of care was not a determining factor in causing the result. In relation to less serious recklessness, on the other hand, the reference to administrative regulations is for the purposes of guidance only. Even if the offence is serious, it may be considered as entailing either serious or minor recklessness, depending on the circumstances. Otherwise, given the breadth of Art. 76 m) LSV which classifies “negligent driving” as a serious offence, most non-serious conducts would automatically be considered as less serious through this kind of Pandora’s box, which must be rejected.

It criticises the authentic interpretation of the rules, which would lead to the objectivisation that is at odds with the assessment of the circumstances involved<sup>9</sup>.

Supreme Court Ruling 344/22 of 6 April (ECLI:TS:2022:1492) recalls that a serious road traffic offence can give rise to both serious and less serious criminal recklessness, depending on the circumstances. Similarly, very serious offences under Art. 77 LSV may entail serious or less serious recklessness, as there is no indication in the CC that the very serious offence is limited to gross recklessness, even though “it is a factor to be taken into account in classifying the conduct”. It stresses that in defining less serious recklessness in Art. 142 PC, it establishes the “floor”, but not the “ceiling”.

---

<sup>8</sup> In this decision, the “unfortunate and dispensable” reforms undertaken in the area of recklessness (legal basis 3) are unequivocally criticised.

<sup>9</sup> “(...) The usefulness of this authentic interpretation is only apparent, as it generates other difficulties associated with the principles of lawfulness, proportionality, legality and culpability. Some of these principles may be irreparably damaged when lawmakers see a thaumaturgical formula to which they can turn in the administrativisation of criminal law. To try to objectify the different categories of recklessness is to disregard the very nature of negligent action”. (legal basis 3)

The aforementioned Plenary Supreme Court Ruling 421/2020 (ECLI:ES:TS:2020:2533) pointed to the possibility that a serious infringement of administrative traffic regulations could constitute less serious recklessness. This is a first approach that acts as a presumption, as the judge cannot be a “slave to administrative cataloguing”.

Supreme Court Ruling 2543/2022 of 22 June (ECLI:ES:TS:2022:2543) is particularly eloquent with regard to distinguishing between the different types of recklessness. The decision concludes that the key differentiating factor between serious and less serious recklessness is to be found in the “intensity or relevance” of the breach of the duty of care, with serious recklessness being that in which there is an intolerable disregard of the rules of care that causes a risk leading to a harmful result. In the less serious case, on the other hand, there is less demand “in the level of foreseeability and requirement of that duty of care”. The High Court insists on the need to take into account the conditions surrounding the specific case in order to assess the parameters that will be decisive in classifying the level of recklessness, such as the “level of requirement of observance” of the standard of care, the “scope of the infringement”, “the intensity or relevance of that infringement” or the risk resulting from the lack of diligence.

In conclusion, the Supreme Court insists on the need for the courts to individualise the circumstances of each case, as the same offence can give rise to serious, less serious or minor recklessness depending on the other elements in the equation. A very serious or serious breach of the standard will serve as an indication that there has been at least less serious recklessness. However, the degree of disregard of the diligence omitted must be taken into account to determine what type of recklessness we are dealing with.

The reference to the conducts under Art. 379 CC (provided that they were a determining factor in the harmful result) will imply the consideration of serious recklessness, but does not close the door to the classification as serious of conducts other than those in which a serious rule is infringed and there is a gross disregard for due diligence.

In the same sense, less serious recklessness may be found when a very serious or serious infringement of road regulations is committed which is a determining factor in the occurrence of the accident, but it may also be found in conduct involving a failure to observe the average duty of care and which does not fall under any of the administrative offences. However, the latter possibility is more remote, as the formula used in Art. 76 m) LSV according to which “negligent driving” is a serious offence covers such a wide range of cases that it is difficult to imagine acts that fall outside its scope.

### 3 CONCLUSIONS

Lawmakers have been shaping recklessness based on social demand, especially with regard to the offences of manslaughter or injury involving the reckless use of a motor vehicle or moped.

There is still no precise rule to avoid some level of discretion being left to the courts, which clearly affects legal certainty. Lawmakers use the terms “serious”, “less serious” and “serious recklessness” without giving them any actual substance.



The determination of serious recklessness poses fewer interpretative problems by establishing the concurrence of certain circumstance under Art. 379 CC that were “decisive” in the production of the result as an objective element. In this way, it has been possible to provide the person applying the rule with criteria that coexists with the court’s power of assessment. Despite the alleged objectivity clause, it is necessary to rule out the automatic application of the precept which would require one to consider *ope legas* recklessness as serious when any of the circumstances under Art. 379 CC are involved. It will always be necessary to establish a causal link between the seriousness of the breach of the duty of care and the result of manslaughter or injury.

Less serious recklessness has, from the outset, given rise to problems that have not been resolved despite the efforts first tackled by Organic Law 2/2019. The reform carried out under this law was unfortunate in its wording, as the disparity of the criteria used in its application led to significant legal uncertainty. The definition of less serious recklessness as “that which is not classified as serious” is void of content, and the reference to the serious infringement of traffic regulations when it this is a determining factor in the production of the act does not offer clarification, among other reasons, because it does not resolve what happens when the infringement is a very serious infringement. In this case, it would be consistent to consider the conduct, at the very least, as less serious recklessness, without being able to rule out its consideration as serious if this was decisive in the production of the result.

We are inclined to understand less serious recklessness as an independent and different figure from the previous minor and serious recklessness, an intermediate step that will need to be looked at in each specific case.

Organic Law 11/2022 sought to prevent judges from applying minor recklessness in the event of death or injury, for which it would have been sufficient to remove the final clause “once the judge or court has assessed the nature of the latter”. Instead, however, the precept was drafted in a cumbersome way, subordinating criminal law to administrative law, presuming serious or less serious recklessness (never minor) when the death or injury was due to a serious infringement of traffic regulations. The clear purpose of the new wording was to prevent victims from having to resort to civil proceedings, thus rendering ineffective the doctrine established in Plenary Supreme Court Ruling 421/2020, of 22 July (ECLI:ES:TS:2020:2533).

There is clearly room for improvement in the definition of recklessness addressed in the latest reform for the following reasons: the precepts are difficult to understand; it limits the freedom of the judge to assess minor recklessness when they consider it appropriate based on the circumstances of the case; it responds to social demands rather than the needs of criminal policy; the successive reforms on the matter (imperfect from a technical perspective) generate insecurity amongst legal operators and, finally, the need to link the degree of recklessness to a catalogue of offences which, in some cases, seem far removed from situations where a real risk to road safety is produced.

The understanding of the legal text could be improved *lege ferenda* by altering the expressions used. Thus, where it says “(...)serious infringements of traffic regulations (...)” it could be changed to “(...) a serious infringement of traffic regulations (...)”, avoiding the automatic referral to the serious administrative infringement and allowing the judge to assess the seriousness of the infringement and its determination for the

accident according to the objective duty of care breached, the risk caused and the relationship with the production of the damage.

This amendment would avoid the automatic consideration that recklessness is less serious when we are faced with a serious traffic offence, especially if we take into account that the offence provided for in letter m) of Art. 76 LSV is so broad that it would classify the majority of conduct as less serious.

The amendments introduced by Art. 142 bis and 152 bis CC entailed a logical increase in the punishment of conduct with more serious results. However, we do not agree with the articles as they fail to specify the cases in which the penalty may be increased by one or two degrees. The deficient legislative technique applied will lead to disparate interpretations by the different courts, meaning it will be necessary to wait for the Supreme Court to establish case law in order to apply the precepts with legal certainty.



#### 4 REFERENCES

Aguado López, S. (2019), La imprudencia menos grave: concepto y criterios para su correcta calificación jurídica tras las últimas reformas. *La Ley Penal*, nº 141, pp. 1-38.

Cuello Contreras, J. C. (2015). Curso de Derecho Penal Parte General (3ª ed.), Madrid, España: Tecnos.

Daunis Rodríguez, A. (2018). La imprudencia menos grave. *Revista para el análisis del derecho*, pp. 1-48.

Delgado Sancho, C. D. (2017). Los delitos imprudentes tras la reforma de la Ley Orgánica 1/2015, especial referencia al homicidio y las lesiones. *Revista Aranzadi Doctrinal*, nº 11.

De Vicente Martínez, R. (2009), Seguridad vial y Derecho penal. En especial el homicidio imprudente con vehículos a motor, *Abogacía*, nº 1.

De Vicente Martínez, R. (2017). La Reforma Penal de 2015 y su incidencia en los accidentes de circulación. *Revista Aranzadi Doctrinal*, nº5, pp.41-47.

Dictamen 2/2016 sobre Ley Orgánica 1/2015, de 30 de marzo, por la que se modifica el Código Penal. Los nuevos conceptos de imprudencia grave y menos grave de los arts. 142 y 152 y su incidencia en la utilización actualizada del Ministerio Fiscal para una efectiva protección penal de la seguridad vial, Madrid: Ministerio de Justicia. Fiscalía General del Estado.

Dictamen 1/2023 sobre la reforma operada por la Ley Orgánica 11/2022, de 13 de septiembre, de modificación del Código Penal en materia de imprudencia en la conducción de vehículos a motor o ciclomotor, Madrid: Ministerio de Justicia. Fiscalía General del Estado.

Frías Martínez, E. (2019). Novedades en el Código Penal, Ley Orgánica 2/19 de 1 de marzo. Imprudencia en la conducción de vehículos a motor o ciclomotores y sanción del abandono del lugar del accidente. *Revista de Tráfico y Seguridad Vial*, nº 237.

Galán Cáceres, J. C. (2017). La imprudencia menos grave luego de la LO 1/2015 de reforma del Código Penal. Las consecuencias en la responsabilidad sanitaria. *Actividad de la Asociación de Fiscales*, nº 25, pp. 1-58. <https://www.fiscal.es/documents/20142/100242/Ponencia+Juan+Calixto+Gal%C3%A1n+C%C3%A1ceres.pdf/96c6f765-0a02-104e-6974-e353a681e295>

Lanzarote Martínez, P. A. (2019). El nuevo delito de abandono del lugar del accidente y otras importantes novedades de la inminente reforma del Código Penal en materia de imprudencia. *Diario La Ley*, nº 9359, pp 2 ss,

Magro Servet, V. (2019), ¿Cómo se van a tramitar ahora las reclamaciones por accidente de tráfico en la vía penal?, *La Ley*, nº 9370, pp 4-7.

Magro Servet, V. (2022), La jurisprudencia del TS y la clarificación entre la imprudencia grave y menos grave, *Revista de Derecho de la circulación*, nº 112, pp. 2-7.

Trapero Barreales, M. (2019). Comentario urgente sobre la reforma penal vial y otros aspectos controvertidos. *Revista Electrónica de Ciencia Penal y Criminología*, nº 11

Ramón Ribas, E. (2015). Comentarios a la reforma penal de 2015, Pamplona, España: Aranzadi.

Rodríguez Lainz, J. L. (2019). Los nuevos delitos leves de imprudencia menos grave en materia de tráfico: aspectos sustantivos y procesales. *Diario La Ley*, nº 9392.

Rodríguez Lainz, J.L. (2019), Comentario de urgencia a la reforma de los delitos leves por imprudencia menos grave en materia de tráfico en la Ley Orgánica 11/2022. *Diario La Ley*, nº 10141.

Roig Torres, M. (2023). Los delitos de homicidio y lesiones causados por imprudencia con vehículo a motor o ciclomotor, Valencia, España: Tirant lo Blanch.

Rueda Martín, M. Á. (2009). La concreción del deber objetivo de cuidado en el desarrollo de la actividad médico-quirúrgica curativa. *Revista para el análisis del Derecho. InDret*, nº 5, pp.1-58.

## 5 ABBREVIATIONS AND ACRONYMS

BOE	Official State Gazette.
CC	Criminal Code
FGE	State Prosecutor's Office.
FSCSV	Road Safety Coordination Prosecutor
LO	Organic Law.
LSV	Road Safety Law.
PPO	Public Prosecutor's Office
MP	Prosecution Authorities
P	Page
TS	Supreme Court
i.e.	for example





**José Javier Martínez Martínez**  
Lieutenant Guardia Civil  
Technical specialist on management  
information technology

**SERIOUS ROAD ACCIDENTS ON  
INTERURBAN ROADS IN THE REGION OF  
MURCIA INVOLVING FOREIGN DRIVERS**



## SERIOUS ROAD ACCIDENTS ON INTERURBAN ROADS IN THE REGION OF MURCIA INVOLVING FOREIGN DRIVERS

**Summary:** INFORMATION SOURCE. DEMOGRAPHIC STUDY. Foreign resident population. Driver census. ANALYSIS OF ROAD ACCIDENTS. Study of the driver of the vehicle involved. Driver responsible for the road accident. Nationality of the driver. CONCURRENT FACTOR. Concurrent factor analysis. Concurrent factor and responsibility in road accidents. Nationality of driver at fault and concurrent factor. ACCIDENT TYPE. Analysis of the accident type. VIOLATION OF THE REGULATIONS. Activity in violation. Violation of administrative rule. ROAD traffic violations in criminal law. CONCLUSIONS. PROPOSALS. BIBLIOGRAPHY.

**Resumen:** La Región de Murcia es la sexta provincia de España con mayor población extranjera residente en valores absolutos. La mayoría de esos extranjeros son inmigrantes por razones laborales y otros eligen esta región por motivos vacacionales o de ocio. En conjunto, en la región de Murcia conviven personas de más de 175 nacionalidades distintas, personas que, aun teniendo hábitos, formas de vida y costumbres diferentes, acaban coincidiendo en las carreteras de la región, en los desplazamientos que realizan en sus vehículos en su vida cotidiana. La DGT<sup>1</sup> realiza estudios estadísticos de casi todas las variables que se pueden medir en un siniestro vial pero no existen estudios que midan esas variables en relación con la nacionalidad del conductor del vehículo siniestrado. La finalidad del presente trabajo es poner de manifiesto cómo se comportan los datos de siniestralidad vial si se analizan en función del origen nacional del conductor para de esta forma disponer de información que nos permita adoptar medidas concretas dirigidas a reducir el número y gravedad de los siniestros viales en la Región de Murcia.

**Abstract:** The Region of Murcia is the sixth province of Spain with the largest resident foreign population in absolute values. Most of these foreigners are immigrants for work reasons and others choose this region for vacation or leisure reasons. As a whole, in the region of Murcia people of more than 175 different nationalities live together, people who, despite having different habits, ways of life and customs, end up coinciding on the roads of the region, in the movements they make in their vehicles in their daily life. The DGT carries out statistical studies of almost all the variables that can be measured in a road accident, but there are no studies that measure these variables in relation to the nationality of the driver of the accident vehicle. The purpose of this paper is to show how road accident data behaves if they are analyzed based on the national origin of the driver.

**Palabras clave:** Siniestralidad vial, Seguridad vial, Región de Murcia, conductor extranjero, nacionalidad del conductor

**Key words:** Road accident rate, Road safety, Region of Murcia, foreign driver, nationality of the driver.

---

<sup>1</sup>General Traffic Authority

The Region of Murcia is a place of residence for a large number of foreigners and people of different national origins. This means that the region's roads are a meeting point for many drivers whose road safety training and safety culture often differ from those of drivers trained in Spain. This, combined with different habits and customs, causes road accidents in the roads of the Region of Murcia to present distinct aspects when studied from the perspective of the driver's nationality.

There are many studies on road accidents. Specifically, the DGT compiles numerous statistics on accidents that provide information on almost all aspects that can be measured in a road accident. This information that is published in the corresponding statistical accident yearbooks. Nevertheless, none of these studies focus on the national origin of the driver.

Given that the Region of Murcia has one of the highest rates of foreign residents in Spain, this paper has studied the road accident rate and its consequences on interurban roads in this region between 2014 and 2022, with the aim of highlighting the circumstances in which foreign drivers were involved in road accidents and how this affected road accident figures in general.

## INFORMATION SOURCE

The study is based on road accidents occurring on interurban roads in the Region of Murcia from 1 January 2014 to 31 December 2022, using the ARENA2 computer system as a source.

ARENA2 is an application that collects and stores data to support the police traffic accident register. ARENA (**A**ccidentes: **RE**cogida de **iN**formación y **A**nálisis) [Accidents: Information Collection and Analysis], which was in place from 2005 until 31 December 2013, was replaced in January 2014 by the current ARENA2 system, which contains new functionalities.

ARENA2 initially allows the officer to enter a minimal set of data collected in the first instance. The data is then expanded with the information demanded by the system, as established in the victim accident report forms, governed by the criteria outlined in Ministerial Order INT/2223/2014, which regulates the communication of information to the National Register of Traffic Accident Victims (Ministerio del Interior, 2014).

One of the main advantages of the information gathering system is that the data collection is performed by the law enforcement officers in charge of traffic monitoring and control who have this responsibility. Based on their presence on the scene, they are responsible for taking statements and drawing up technical reports, as well as attending to those involved and restoring road safety. From the investigation, the officers have extensive knowledge of the event and are therefore considered to be the ideal subjects to fill in the information in the traffic accident file. Furthermore, the information is sent to the file using standardised forms, in accordance with common definitions and procedures that apply to the whole of Spain.



## DEMOGRAPHIC STUDY

In order to be able to draw valid conclusions about the significance of foreign drivers in road accidents in the Region of Murcia, it is necessary to have some reference values for the presence of foreigners in this region.

For this purpose, information on the census of inhabitants has been accessed through the web portal of the Spanish National Statistics Institute (INE - Instituto Nacional de Estadística) (Ministerio de Asuntos Económicos y Transformación Digital, 2023), as well as the Regional Statistical Centre of Murcia (Centro Regional Estadístico de Murcia - CARM, 2023)(CREM - Centro Regional Estadístico de Murcia), with data up to 2021.

Meanwhile, it was considered necessary to have specific information on the census of drivers and vehicles in the Region of Murcia in order to have specific data on the number of foreign drivers on the census. This information was provided by the DGT Data Office through the Murcia Provincial Traffic Headquarters (Oficina del Dato, DGT, 2023).

### FOREIGN RESIDENT POPULATION

In the year 2021, Spain had a foreign resident population<sup>2</sup> of 5,440,148 people, of which 222,324 resided in the province of Murcia. This places Murcia sixth in terms of Spanish provinces with the most foreign residents, only behind Madrid, Barcelona, Alicante, Valencia and Málaga.

When examining the data specific to the Region of Murcia furnished by CREM, of the province's total population of 1,518,486 residents, 222,324 are of non-native origin, accounting for 14.64% of the population.

Of all foreigners, almost half, 103,736 (46.66%) are of African origin. Of these, 89,914 are Moroccan, which represents 40.44% of the total number of foreigners. This figure places the province of Murcia second in Spain with the highest number of Moroccan residents, only behind Barcelona with 137,010 and ahead of Madrid with 80,090. Of the other African countries, the most prominent are Senegal with 3,048 people, Algeria with 3,038 people, Ghana with 2,005 people and Mali with 1,723 people.

Of the 55,731 people of European origin residing in the Region of Murcia, the largest population is from the United Kingdom with 16,625 people, followed by Romania with 10,655, Ukraine with 7,433 and Bulgaria with 5,140 people.

There are 43,725 people of South American origin residing in the province of Murcia. Ecuador accounts for the most with 17,603 people, followed by Colombia with 8,162 and Bolivia with 7,491.

---

<sup>2</sup> Includes foreigners with Residence Card and Registration Certificate.

## DRIVER CENSUS

In order to study the relationship between the origin of the driver and the road accident rate, in addition to knowing the weight of the foreign population in the Region of Murcia, it is important to know the weight of this population in the census of drivers.

The information provided by the Data Office of the DGT, which refers to 31 December 2022, indicates that 9.54% of the drivers registered in the register of drivers in the Region of Murcia are foreign drivers who hold a driving licence issued in Spain. The other 90.46% are Spanish drivers.

Another important piece of information provided by the DGT is that since 2014, 75.47% of the driving licences obtained by foreign residents in Murcia were obtained through the method of exchanging the driving licence of their country of origin for the equivalent in Spain. The remainder were obtained following theoretical and practical examination.

Finally, with regard to vehicle ownership, according to the vehicle registration databases, 11.24% of all vehicles registered in Murcia are in the name of a foreign person.

## ANALYSIS OF ROAD ACCIDENTS

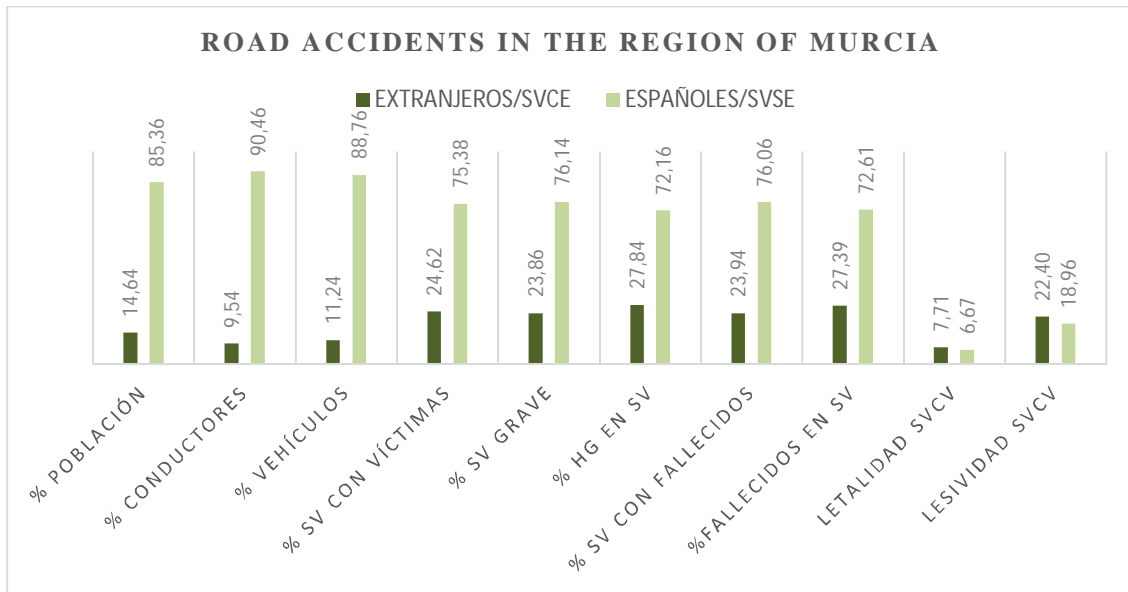
Before starting the analysis and to provide clarity to the forthcoming data, it is advisable to become acquainted with the abbreviations that will be used.

*Table 1. Abbreviations*

MEANING OF ABBREVIATIONS	
SV	ROAD ACCIDENT
SVG	SERIOUS ROAD ACCIDENT
SVCE	ROAD ACCIDENT WITH FOREIGN DRIVER INVOLVED
SVSE	ROAD ACCIDENT WITHOUT FOREIGN DRIVER INVOLVED
SVCV	ROAD ACCIDENT WITH CASUALTIES
HG	SERIOUSLY INJURED
SVGCE-RESP	SERIOUS ROAD ACCIDENT WITH FOREIGN DRIVER INVOLVED AT FAULT FOR THE ACCIDENT
SVGSE-RESP	SERIOUS ROAD ACCIDENT WITHOUT FOREIGN DRIVER INVOLVED AT FAULT FOR THE ACCIDENT

*Source: Prepared internally*

In order to make a first approximation to the data on road accident (SV) rates, the data on population, drivers and vehicle ownership were compared with the accident rate data, differentiating between foreign drivers and Spanish drivers. The results are shown in the following graph.



*Graph 1. Comparative summary information chapter. Source Arena 2. Prepared internally*

What the graph shows us is that in the period 2014-2022, with a 14.64% foreign population in the Region of Murcia, a census of foreign resident drivers of 9.54% and a percentage of vehicles registered in the name of a foreign citizen of 11.24%, there was at least one foreign driver involved in 24.62% of road accidents with casualties, 23.86% of serious road accidents and 23.94% of road accidents with fatalities. Furthermore, 27.84% of serious injuries and 27.39% of fatalities in road accidents occurred in accidents where at least one foreign driver was involved. Lastly, the frequency of foreign driver involvement in road accidents resulted in 7.71 fatalities and 22.40 seriously injured for every 100 road accidents with casualties; in road accidents where no foreign drivers were involved, the fatality and injury rates fell to 6.67 and 18.96, respectively.

After analysing the resulting data, it can be affirmed that the number of road accidents involving a foreign driver exceeded what could be expected, in view of the weight of the foreign population in the Region of Murcia.

Similarly, it is observed that the most serious consequences of road accidents (fatality and injury rates) are worse in accidents involving a foreign driver than in those where a foreign driver is not involved.

### STUDY OF THE DRIVER OF THE VEHICLE INVOLVED

In order to study the frequency of occurrence of serious road accidents (SVG) and the involvement of foreign drivers, it is necessary to know the number of vehicles involved.

Table 2. Type of vehicle in serious road accident.

VEHICLE TYPE IN THE 968 SVG											
SVGTC	BUS	BIC	LOR	VAN	CYCL	MOT	PAS	OTHE	PE	OVERAL	%
VEH. DRIVEN BY FOREIGNERS	2	13	33	30	2	15	159	5	3	262	<b>16.10</b>
VEH. DRIVEN BY SPANIARDS	8	58	148	116	61	246	666	38	24	1365	<b>83.90</b>
TOTAL, VEHICLES IN SVG	10	71	181	146	63	261	825	43	27	1627	100.00

Source ARENA 2. Prepared internally

Thus, 16.10% of all vehicle drivers or pedestrians involved in SVG were foreigners, while the remaining 83.9% were Spanish drivers or pedestrians.

We can also find out the percentage in which different types of vehicles are involved.

Table 3. Percentage of vehicle type in serious road accidents.

PERCENTAGE OF VEHICLE TYPE IN THE 968 SVG						
SVGTC	%LOR	%VAN	%CYCL	%MOT	%PAS	% TOTAL
VEH. DRIVEN BY FOREIGNERS	12.60	11.45	0.76	5.73	60.69	<b>16.10</b>
VEH. DRIVEN BY SPANIARDS	10.84	8.50	4.47	18.02	48.79	<b>83.90</b>
TOTAL, VEHICLES IN SVG	11.12	8.97	3.87	16.04	50.71	100.00

Source ARENA 2. Prepared internally

Thus, of the vehicles used by foreigners when the SVGs occurred, 60.69% were passenger cars, followed by lorries with 12.60% and vans with 11.45%. Among vehicles driven by Spaniards, the most used were also passenger cars with 48.79%, followed by motorbikes with 18.02%, lorries with 10.84% and vans with 8.49%.

As we can see, among foreign drivers, commercial vehicles, lorries and vans have more weight than among Spanish drivers, where, after passenger cars, the most common vehicles in serious road accidents were motorbikes, a vehicle used more often for leisure.

### DRIVER RESPONSIBLE FOR THE ROAD ACCIDENT

Of the 231 serious road accidents involving a foreign driver that occurred in the period under study, investigations revealed that in 164 of them the foreign driver was at fault for the accident, causing 60 fatalities and 179 serious injuries in these accidents alone.

This means that, of the 968 serious road accidents that occurred, in 16.94%, the party at fault was a foreign driver; in the remaining 83.05%, the party at fault was a Spanish driver.

As a result of the 164 accidents caused by a foreign driver, 60 fatalities occurred, representing 19.10% of the total number of fatalities in serious road accidents.

*Table 4. Road accidents and fatalities by type of driver at fault*

DRIVER RESPONSIBILITY IN SVG				
TYPE OF DRIVER AT FAULT	No. of SVG	% of SVG	No. FATALITIES	%FATALITIES
SPANISH DRIVER	804	83.05	254	80.99
FOREIGN DRIVER	164	16.94	60	<b>19.10</b>
OVERALL	968	100	314	100

*Source ARENA 2. Prepared internally*

Similarly, it can be stated that as a result of the 164 accidents with a foreign driver at fault, 179 serious injuries occurred, which accounted for 19.93% of the total number of serious injuries in road accidents.

*Table 5. Road accidents and serious injuries by type of driver at fault*

DRIVER RESPONSIBILITY IN SVG				
TYPE OF DRIVER	No. of SVG	% of SVG	No. HG	%HG
SPANISH DRIVER	804	83.05	719	80.07
FOREIGN DRIVER	164	16.94	179	<b>19.93</b>
OVERALL	968	100	898	100

*Source ARENA 2. Prepared internally*

#### NATIONALITY OF THE DRIVER

In the study period, 262 foreign drivers of 34 different nationalities were involved in one of the 231 serious road accidents involving a foreign driver. Only accidents involving drivers of 7 of these 34 nationalities account for 68.08% of the total, with the remaining 27 nationalities being of little statistical interest.

Table 6. Foreign drivers involved and at fault in serious road accidents by nationality.

NATIONALITY FOREIGN DRIVERS IN SVG					
% OF THE FOREIGN POPULATION IN THE R. MURCIA	NATIONALITY	NUMBER OF FOREIGN DRIVERS INVOLVED IN SVG	% FOREIGN DRIVERS INVOLVED IN SVG	NUMBER OF FOREIGN DRIVERS AT FAULT	% FOREIGN DRIVERS AT FAULT
40.44	MOROCCO	103	<b>39.31</b>	69	<b>42.07</b>
7.91	ECUADOR	43	<b>16.41</b>	28	<b>17.07</b>
7.47	UNITED KINGDOM	27	<b>10.31</b>	16	<b>9.76</b>
4.79	ROMANIA	22	<b>8.4</b>	13	<b>7.93</b>
3.36	BOLIVIA	9	<b>3.44</b>	6	<b>3.66</b>
3.34	UKRAINE	5	<b>1.91</b>	4	<b>2.44</b>
0.77	MALI	5	<b>1.91</b>	4	<b>2.44</b>
31.92	OTHER	48	<b>18.32</b>	24	<b>14.63</b>
100	TOTAL, FOREIGNERS	<b>262</b>	<b>100</b>	<b>164</b>	<b>100</b>

Source ARENA 2. Prepared internally

Firstly, the table shows that while the Moroccan population is the largest in the Region of Murcia with 40.44% of the total number of foreign residents, they account for 39.01% of the foreign drivers involved in SVGs and 42.07% of the foreign drivers at fault for an SVG.

The second most significant nationality is Ecuadorian, which accounted for 7.91% of the total resident foreign population, 16.41% of the foreign drivers involved in serious road accidents and 17.07% of the foreign drivers at fault for the accident.

In third place were residents from the UK, who accounted for 7.47% of all foreign residents, 10.31% of all foreign drivers involved in serious road accidents and 9.76% of all foreign drivers at fault for the accident.

Lastly, foreign nationals from Romania, who, at 4.79% of the resident immigrant population, accounted for 8.40% of the foreign drivers involved and 7.93% of those at fault for a serious road accident.

An analysis of the information shown shows that Ecuadorian drivers are the worst performers of all those listed, as the relative frequency of both involvement and responsibility in serious road accidents is more than double the percentage of the resident foreign population.

Drivers of Romanian nationality also have a high percentage of both involvement and responsibility in relation to the percentage that their nationality represents in the total foreign population in Murcia. Nevertheless, in addition to the fact that their involvement in absolute numbers is low, the percentages do not reach the levels of Ecuadorian drivers.

The rest of the nationalities show data on both involvement in serious road accidents and responsibility in these accidents, in line with the percentage of each nationality in the overall foreign population of the Region of Murcia.

In the following table we are going to check the weight of these data with respect to the population of the Region of Murcia as a whole. To do so, we are going to compare them to all drivers involved in SVGs (not only foreigners) and all SVGs that occurred in the study period (968 SVGs).

*Table 7. Foreign drivers involved and at fault in serious road accidents by nationality*

<b>NATIONALITY FOREIGN DRIVERS IN SVG</b>			
<b>% POPULATION IN THE REGION OF MURCIA</b>	<b>NATIONALITY</b>	<b>% DRIVERS IN SVG. (% of 1627)</b>	<b>% DRIVERS AT FAULT IN SVG. (% of 968)</b>
<b>5.92</b>	<b>MOROCCO</b>	<b>6.33</b>	<b>7.13</b>
<b>1.15</b>	<b>ECUADOR</b>	<b>2.64</b>	<b>2.89</b>
1.09	UNITED KINGDOM	1.66	1.65
0.7	ROMANIA	1.35	1.34
0.49	BOLIVIA	0.55	0.62
0.48	UKRAINE	0.31	0.41
0.11	MALI	0.31	0.41
4.7	OTHER	2.95	2.48
14.64	TOTAL, FOREIGNERS	16.10	16.94

*Source ARENA 2. Prepared internally*

From the information shown we know that the Moroccan population accounts for 5.92% of the total population of the Region of Murcia, 6.33% of drivers involved in serious road accidents and 7.13% of those at fault.

Moroccans, like the rest of the nationalities of foreign drivers, show higher figures for involvement and responsibility in serious road accidents than their respective percentage of the total population. However, the most striking figure is that of Ecuadorian nationals, who represent 1.15% of the population of the Region of Murcia and have been involved in 2.64% of serious road accidents, where they are at fault for 2.89% of them.

## **CONCURRENT FACTOR**

The criteria to consider when completing traffic accident report forms are outlined in Annex II of Ministerial Order INT/2223/2014, which regulates the communication of information to the National Register of Traffic Accident Victims (Ministerio del Interior, 2014). A list of 23 items is included in these forms under the heading "CONCURRENT FACTOR".

In the last update of the ARENA2 APPLICATION CONTENT MANUAL (Observatorio Nacional de Seguridad Vial, 2023) concurrent factors are defined as “*the factors that have had an impact on the accident in the officer's opinion and whose importance appears to be decisive in the production of the accident*”, being a multiple-choice field with 23 options.

It is of interest to analyse the concurrent factors (CF) in serious road accidents and to compare them with the different sets of accidents under study, i.e. to compare whether



or not the most frequent CFs in serious road accidents involving a foreign driver (SVGCE) coincide with the most frequent CFs in serious road accidents without foreign driver involvement (SVGCE). Similarly, it is also of interest to study the incidence of a given CF in relation to the nationality of the driver.

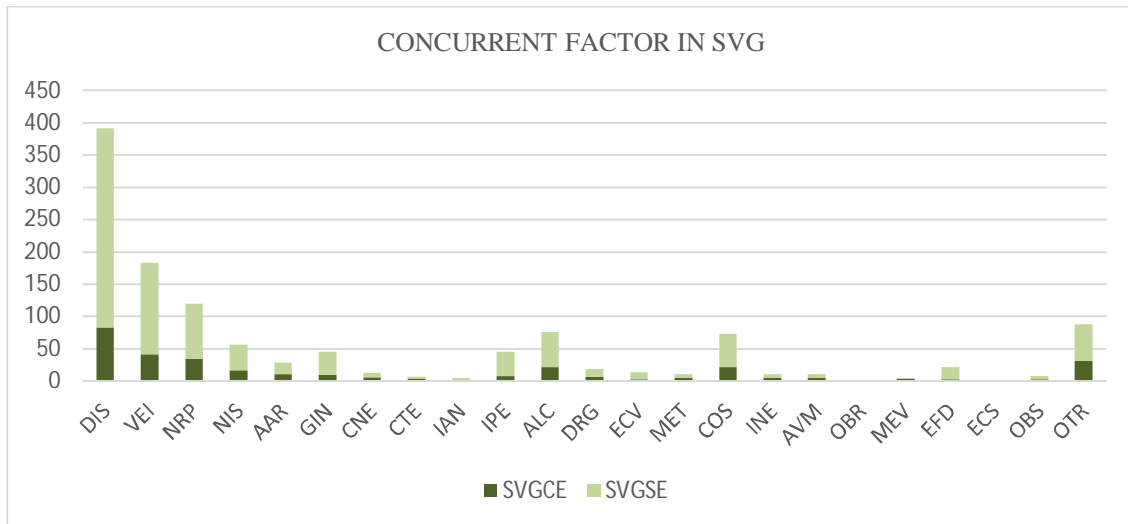
*Table 8. Types of concurrent factors in road accidents*

CONCURRENT FACTOR (CF)	ABBREVIATION
Distracted or inattentive driving	DIS
Inappropriate speed	VEI
Failure to yield	NRP
Failure to maintain a safe distance	NIS
Unlawful overtaking	AAR
Wrong turn	GIN
Negligent driving	CNE
Reckless driving	CTE
Animal trespassing on the carriageway	IAN
Pedestrian trespassing on the carriageway	IPE
Alcohol	ALC
Drugs	DRG
State or condition of the road	ECV
Adverse weather	MET
Tiredness or sleepiness	COS
Driver inexperience	INE
Mechanical failure	AVM
Section under construction	OBR
Poor condition of the vehicle	MEV
Illness	EFD
State or condition of signage	ECS
Obstacle in roadway	OBS
Other factor	OTR

*Source ARENA2. Prepared internally*

## CONCURRENT FACTOR ANALYSIS

The following graph shows the absolute frequency of each CF in the set of SVGs and, within these, how they are distributed between road accidents with and without a foreign driver involved. It should be made clear that in each road accident one or more factors may be involved in triggering the accident.



*Graph 2. CF in SVG with and without foreign driver involved. Source Arena2. Prepared internally*

As can be seen in the graph, the CF that is most frequently repeated both in the total SVG and in the SVGCE and SVGSE groups into which it is divided is DISTRACTION, followed by INAPPROPRIATE SPEED and FAILURE TO YIELD. The concurrent factors ALCOHOL, TIREDNESS OR SLEEPINESS and FAILURE TO MAINTAIN A SAFE DISTANCE are repeated much less frequently. The remaining CFs have a very low incidence in the three groups of road accidents studied and are not statistically relevant, so they will not be taken into account in the following phases of the study.

#### CONCURRENT FACTOR AND RESPONSIBILITY IN ROAD ACCIDENTS.

The CF is an indicator that is directly related to the driver of the vehicle at fault for the accident. We will now analyse the frequency of this indicator among accidents with a foreign driver involved in which the foreign driver was at fault for the accident in order to relate it to the SVG as a whole.

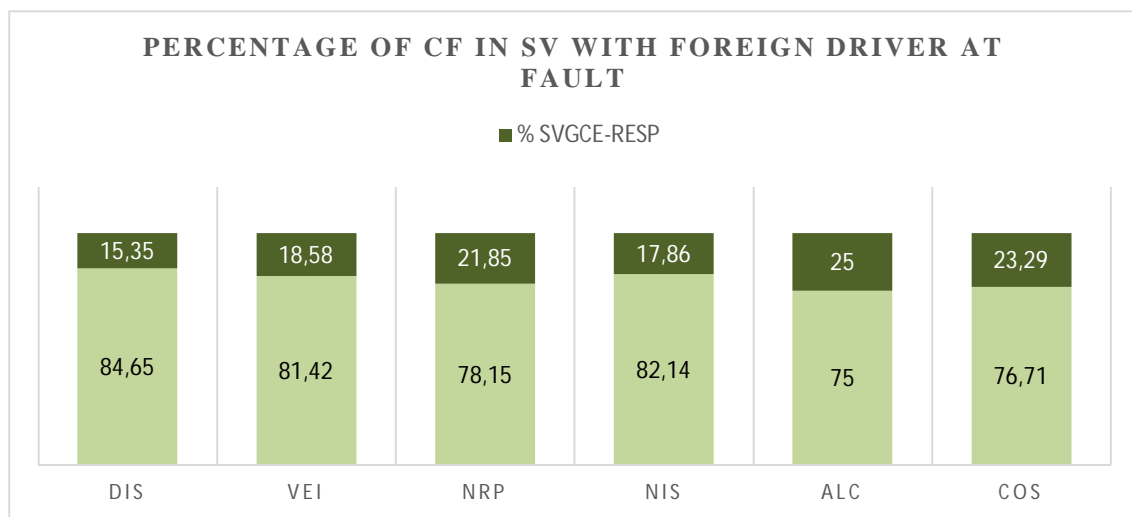
For this purpose, we will check which of the CFs were most frequent in serious road accidents involving a foreign driver (SVGCE-RESP), in order to focus our study on these and disregard those which, due to their low incidence, have an irrelevant weight in the total.

Table 9. Concurrent factor in SVG when the foreign driver is at fault for the SV.

CONCURRENT FACTOR SVGCE-RESP												
	DIS	VEI	NRP	NIS	AAR	GIN	CNE	CTE	IAN	IPE	ALC	DRG
TOTAL, IN SVG	391	183	119	56	28	45	12	6	4	45	76	18
IN SVGCE-RESP	<b>60</b>	<b>34</b>	<b>26</b>	<b>10</b>	8	6	3	2	1	4	<b>19</b>	4
	ECV	MET	COS	INE	AVM	OBR	MEV	EFD	ECS	OBS	OTR	
TOTAL, IN SVG	13	10	73	10	10	0	4	21	0	7	88	
IN SVGCE-RESP	1	1	<b>17</b>	4	2	0	2	2	0	1	19	

Source Arena2. Prepared internally

In view of the data shown in the table, in the following graph we will focus the study only on the six most recurrent CFs and show in what proportion of serious road accidents SVGCE-RESPs with a given CF appear.



Graph 3. Percentage of CF in SVG when the foreign driver is at fault for the SV. Source Arena2. Prepared internally

A detailed analysis of the data shown shows that, of all serious road accidents with CF - FAILURE TO YIELD, a foreign driver was at fault for 21.85%; of serious road accidents with CF - TIREDNESS OR SLEEPINESS, a foreign driver was at fault for 23.29%; finally, most strikingly, of serious road accidents with CF - ALCOHOL, in 25% (one in four), a foreign driver was at fault for the accident.

#### NATIONALITY OF DRIVER AT FAULT AND CONCURRENT FACTOR

Previous sections analysed serious road accidents and stated the incidence of the nationality of the foreign driver on ‘at fault’ data, concluding that, taken by nationality, in almost all cases, foreign drivers showed higher ‘at fault’ data in serious road accidents than their share of the population in the Region of Murcia as a whole, as shown in table 5.

Below is a table showing the frequency with which each of the six most important CFs is repeated among foreign drivers at fault for serious road accidents, broken down by nationality.

*Table 10. CF in SVG with foreign driver at fault by driver nationality*

CONCURRENT FACTOR IN SVG WITH FOREIGN DRIVER AT FAULT						
NATIONALITY FOREIGN DRIVER AT FAULT	CONCURRENT FACTORS					
	DIS	VEI	NRP	NIS	ALC	COS
MOROCCO	22	13	17	3	7	5
ECUADOR	11	5	3	3	6	5
UNITED KINGDOM	6	2	2			
ROMANIA	3	5	2	1	0	1
BOLIVIA	3	3			1	
UKRAINE	2	1			1	
MALI	2	1		1		1

*Source Arena2. Prepared internally*

Once again, drivers from Morocco and Ecuador show the highest values, as they are the ones with the highest frequency of responsibility for serious road accidents.

We will only refer to drivers of those two nationalities, and in the following table, we will display the factors that contributed to the serious road accidents for which they were at fault, along with the percentage this data represents of the total for that specific factor.

*Table 11. Percentage of the CF driver at fault SVG nationality Morocco and Ecuador*

PERCENTAGE OF CF DRIVER AT FAULT						
NATIONALITY FOREIGN DRIVER AT FAULT	CONCURRENT FACTORS					
	DIS	VEI	NRP	NIS	ALC	COS
ALL DRIVERS	391	183	119	56	76	73
% CF SVG	100	100	100	100	100	100
MOROCCAN DRIVER	22	13	17	3	7	5
% MOROCCAN DRIVER	<b>5.63</b>	<b>7.10</b>	<b>14.29</b>	<b>5.36</b>	<b>9.21</b>	<b>6.85</b>
ECUADORIAN DRIVER	11	5	3	3	6	5
% ECUADORIAN DRIVER	<b>2.81</b>	<b>2.73</b>	<b>2.52</b>	<b>5.36</b>	<b>7.89</b>	<b>6.85</b>
<b>TOTAL % DRIVER MOR + ECUA</b>	<b>8.44</b>	<b>9.84</b>	<b>16.81</b>	<b>10.71</b>	<b>17.11</b>	<b>13.70</b>

*Source Arena2. Prepared internally*

Analysing the data in this way, we can conclude that in 16.81% of the SVGs with CF - FAILURE TO YIELD and in 17.11% of the SVGs with CF - ALCOHOL, a Moroccan driver or an Ecuadorian driver was at fault for the accident, when between the two nationalities they account for 7.07% of the population of the region.

### ACCIDENT TYPE

The type of accident is an additional factor to be considered when investigating a road accident. The method used to determine the type of accident and its sequencing is the METRAS method (Measuring and Recording Traffic Accident Sequence)<sup>3</sup> by means of which the instructor, with the study and analysis of the road accident, establishes and reflects in the ARENA2 application the order in which the different events (types of accident) occurred in a serious road accident and the units (vehicles, pedestrians, etc.) that were affected, as well as the event that triggered the most serious consequences for those involved in the accident (Observatorio Nacional de Seguridad Vial, 2023).

In this way, this data is reflected in the ARENA report of each accident by assigning, in the corresponding field, one of the 53 events (types of accident), which are divided into 8 categories, as can be seen in the following image extracted from Order INT/2223/2014, of 27 October, which regulates the communication of information to the National Register of Traffic Accident Victims.

SECUENCIA DEL ACCIDENTE (CUMPLIMENTAR SÓLO EN CASO DE ACCIDENTES GRAVES O MORTALES)			TIPOS DE EVENTOS:																																		
Los vehículos se identificarán como V1, V2, V3, V... Los peatones se identificarán como P1, P2, P3, P... Los conductores que hayan sido atropellados (se han caído del vehículo, estaban subiendo o bajando del mismo...) se identificarán como C. Se le asignará un número C1, C2, C3 teniendo en cuenta el vehículo en que viajaban). En el caso de los pasajero se utilizará PA1, PA2... siguiendo la misma lógica.			<b>COLISIÓN ENTRE VEHÍCULOS</b> 1. COLISIÓN FRONTAL 2. COLISIÓN FRONTOLATERAL AFECTANDO EL LADO DERECHO 3. COLISIÓN FRONTOLATERAL AFECTANDO EL LADO IZQUIERDO 4. COLISIÓN LATERAL O REFLEJA 5. RASPADO POSITIVO 6. RASPADO NEGATIVO 7. COLISIÓN POR DETRÁS, ALCANCE O EN CARAVANA 8. ALCANCE INVERSO 9. COLISIÓN POSTERIOR-LATERAL 10. EMPOTRAMIENTO																																		
<b>MÉTODO METRAS DE SECUENCIACIÓN DEL ACCIDENTE</b> <table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th>UNIDADES IMPLICADAS</th> <th>EVENTOS</th> <th>SUCESO MÁS GRAVE</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>			UNIDADES IMPLICADAS	EVENTOS	SUCESO MÁS GRAVE																															<b>ATROPELLO</b> 11. ATROPELLO A PERSONA 12. ATROPELLO A ANIMAL → <input type="text"/>	
UNIDADES IMPLICADAS	EVENTOS	SUCESO MÁS GRAVE																																			
Ejemplar 1: <table border="1" style="display: inline-table;"><tr><td style="background-color: yellow;"></td><td style="background-color: blue;"></td><td style="background-color: green;"></td></tr></table> Ejemplar 2: <table border="1" style="display: inline-table;"><tr><td style="background-color: yellow;"></td><td style="background-color: blue;"></td><td style="background-color: green;"></td></tr></table> Ejemplar 3: <table border="1" style="display: inline-table;"><tr><td style="background-color: yellow;"></td><td style="background-color: blue;"></td><td style="background-color: green;"></td></tr></table>												<b>CAÍDA</b> 13. CAÍDA EN LA VÍA 14. CAÍDA DE PASAJERO DENTRO DE BUS																									
Como guía puede identificar en estos diagramas a qué ejemplar en papel corresponde cada vehículo o peatón (si hay más de dos vehículos o más de un peatón) y el color que lo representa en papel (V1, P1...).			<b>CHOQUE CONTRA OBSTÁCULO</b> 15. ELEMENTOS DE OBRAS 16. CONOS U OTROS ELEMENTOS DE BALIZA MÓVILES 17. VALLA (NO BARRERA DE SEGURIDAD) 18. DESPREMIENTOS DE PIEDRA O VEGETACIÓN 19. VEHÍCULO DETENIDO 20. CARGA O ELEMENTOS DE OTROS VEHÍCULOS 21. VEHÍCULOS IMPLICADOS EN ACCIDENTE PREVIO																																		
NOTA: El vehículo o peatón que haya intervenido en primer lugar en un evento del accidente se situará en la primera columna de la secuenciación, y así sucesivamente. En el caso de vehículos que han intervenido en el accidente pero no han sufrido directamente las consecuencias del mismo se indicarán en la tabla y se indicará: Evento 59.			<b>SALIDA DE LA CALZADA</b> 22. SALIDA POR LA DERECHA 23. SALIDA POR LA IZQUIERDA 24. SALIDA EN LÍNEA RECTA 25. CRUCE DE MEDIANA 26. INVASIÓN DE OTRA VÍA O CALZADA 27. RETORNO A LA VÍA																																		
VEHÍCULO IMPLICADO SIN EVENTO 59. SIN EVENTO O IMPLICADO SIN CHOQUE NI COLISIÓN			<b>CHOQUE CONTRA ELEMENTOS FIJOS</b> 28. GLORIETA 29. REFUGIO/ISLETA 30. BORDILLO 31. BOLLARDS 32. SEÑAL DE TRÁFICO 33. SETOS, ARBUSTOS 34. ÁRBOL 35. FAROLA O POSTE 36. CONTENEDOR 37. FUENTE O ESTATUA 38. PARADA DE BUS 39. BARRERA DE CONTENCIÓN DE VEHÍCULOS 40. BARRERA DE PASO A NIVEL 41. AMORTIGUADORES DE IMPACTO 42. PASO SALVACUNETAS 43. PUNTE O TUNEL 44. DIQUE, MURO DE CONTENCIÓN 45. CASA, MURO O EDIFICIO 46. MURO DE NIEVE O HIELO 47. ROCA 48. OTROS ELEMENTOS VUELCO, INCENDIO, REVENTÓN, OTRO TIPO 49. GIROS SOBRE SI MISMO 50. VUELTAS DE TONEL O DE CAMPANA 51. VUELCO DEL VEHÍCULO 52. INCENDIO DEL VEHÍCULO 53. DESPEÑAMIENTO 54. INMERSIÓN 55. DESPLAZAMIENTO DE LA CARGA 56. SEPARACIÓN DE UNIDADES DE CARGA 57. DESPREMIENTO DE CARGA 58. OTRO TIPO DE SUCESO																																		

Graph 4. Accident sequence. Source: Order INT/2223/2014.

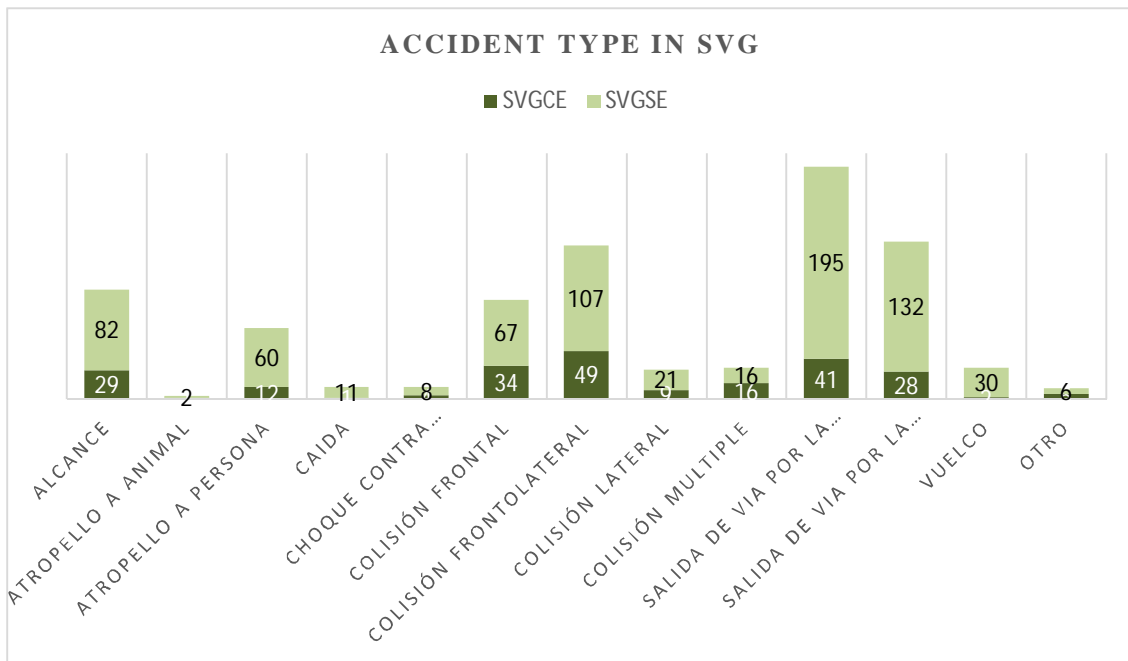
### ANALYSIS OF THE ACCIDENT TYPE

When analysing the accident type (AT), the aim is to find out whether there are any accident types in SVGs as a whole that are abnormally frequent among foreign drivers.

For this purpose, we will present the corresponding information in a graph. It will display the absolute frequency of different ATs recorded in the ARENA2 application,

<sup>3</sup> ARENA 2 application contents manual

both in the entirety of all SVGs and in SVGs involving a foreign driver (SVGCE), as well as SVGs without a foreign driver involved (SVGSE). Additionally, it will illustrate the relative frequency of each AT within the total of the 968 SVGs under study.



Graph 5. Accident type in SVG by type of driver. Source ARENA2. Prepared internally

As you can see, some ATs had low representation within the set of serious road accidents, rendering their study statistically insignificant. Henceforth, we will focus on examining the six most common ATs: REAR-END COLLISION, PEDESTRIAN COLLISION, HEAD-ON COLLISION, FRONTAL-SIDE COLLISION, RIGHT-SIDE DEPARTURE and LEFT-SIDE DEPARTURE

This way, we can verify that 33.66% (34 out of 67) of the serious road accidents that occurred due to HEAD-ON COLLISION and 31.41% (49 out of 107) of those caused by FRONTAL-SIDE COLLISION occurred with a foreign driver involved in the accident.

Since the type of accident is directly related to the driver at fault for the accident, we will see how often each AT occurred in accidents where foreign drivers were at fault.

As mentioned above, foreign drivers were responsible for 16.94% of all serious road accidents, so in order to find out whether a certain type of accident occurs in a relevant percentage of road accidents with a foreign driver at fault, it is necessary to compare its frequency with this figure.

Table 12. Percentage of AT in SVG with foreign driver involved who is at fault for SV

FREQUENCY OF AT IN SVGCE-RESP			
ACCIDENT TYPE	IN SVGCE RESP	% OF AT ON SVG	IN SVG
REAR-END COLLISION	12	10.81	111
PEDESTRIAN COLLISION	8	11.11	72
HEAD-ON COLLISION	21	<b>20.79</b>	101
FRONTAL-SIDE COLLISION	35	<b>22.44</b>	156
RIGHT-SIDE DEPARTURE	38	16.10	236
LEFT-SIDE DEPARTURE	27	16.88	160
OTHER TYPES OF ACCIDENTS	23	17.42	132
OVERALL	164		968

Source ARENA2. Prepared internally

That said, based on the data presented in the table, we can conclude that in 20.79% of serious road accidents due to HEAD-ON COLLISION and 22.44% of accidents caused by FRONTAL-SIDE COLLISION, a foreign driver was at fault for the accident.

## VIOLATION OF THE REGULATIONS

### ACTIVITY IN VIOLATION

The road system is mainly made up of the human factor, the infrastructure factor and the vehicle factor, to which we can add the environmental and regulatory factors.

A road accident occurs when there is a failure in one or more of these factors, either due to a voluntary or involuntary action of the driver or a noticeable malfunction of the infrastructure, environment or vehicle conditions.

Clearly, not all factors have the same weight in the cause of road accidents. The human factor is the most important, while other factors are relegated to second place.

At the First UN Global Road Safety Week held from 23-29 April 2007, (Organización Muncial de la Salud, 2006) one of the key messages was "road safety is no accident". Since then, it has been more appropriate to use the term "road accident" rather than "traffic accident" to refer to the "causal" rather than "casual" event that occurs when the disruption to the road system occurs and the accident takes place.

As a prelude to a road accident, on many occasions there are what we can call "incidents", which are events that occur while driving and which constitute dangerous or risky situations that in most cases do not end up causing a road accident, although, if repeated, will probably end up causing one.

In this section, the aim is to establish whether there is a direct correlation between traffic incidents that occur while driving and the serious road accidents that happen—in other words, between violations of traffic regulations and the occurrence of serious road accidents involving foreign drivers in the Region of Murcia.

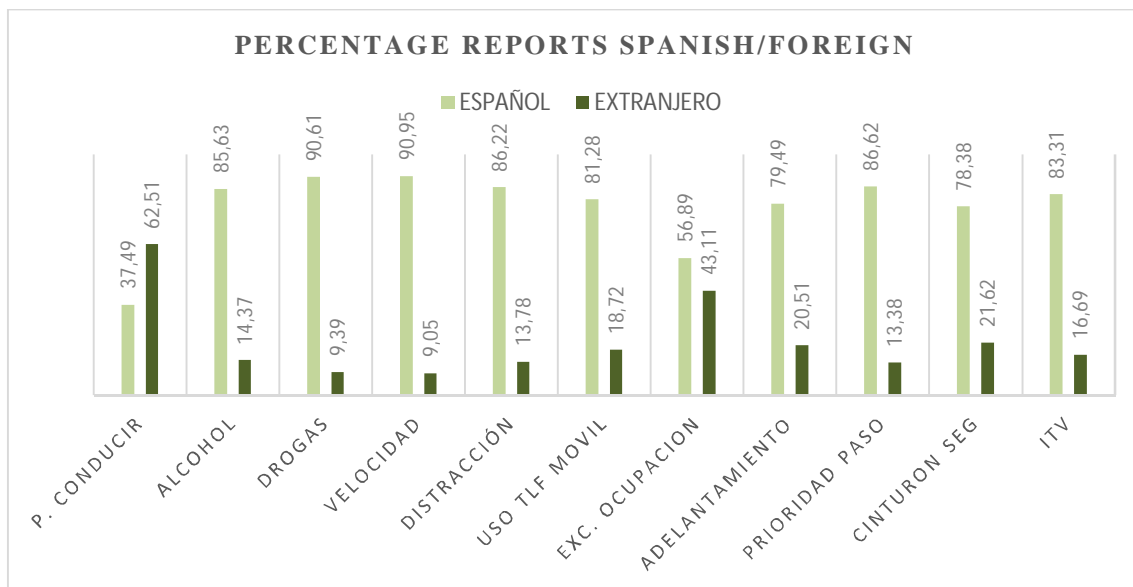


As is well known, road traffic violations can be of an administrative or criminal nature, and whether they are of one or the other depends on the seriousness of the reproach that the legislator has considered the action deserves.

### VIOLATION OF ADMINISTRATIVE RULE

In order to establish the relationship between administrative violations of road regulations (Road Safety Law and Regulations) and road accidents and their consequences, we studied the frequency of 11 types of offences detected by the Traffic Group of the Civil Guard in the Region of Murcia. Each of the analysed reports is linked to one or several of the most significant concurrent factors in the serious road accidents involving foreign drivers in the Region of Murcia, or with the consequences on victims of these accidents.

The aforementioned study consisted of an analysis of the frequency of these violations on interurban roads in the Region of Murcia between 2014 and 2022, which is shown in the following graph.



Graph 6. Percentage of complaints by type of complaint and type of driver. Source: ATGC. Statistical Studies and Analysis Section. Prepared internally

An analysis of the information shows that 62.51% of the violations for driving without a driving licence are committed by foreign drivers. The data reveals that many foreigners drive in Spain without a valid driving licence. This translates into a lack of skills and knowledge of road regulations, as well as a lack of driving expertise and experience, which often leads to road accidents.

Road accidents in which the foreign driver is at fault and can be linked to this type of violation are those where the CF is associated with lack of skill or unfamiliarity with the rules, such as: inappropriate speed (VEI) where the foreign driver is at fault for 18.58% of the SVGs; failure to yield (NRP) where they ARE responsible for 21.85% of SVGs; or failure to maintain a safe distance (NIS) where they are responsible for 17.86% of SVGs.

In the case of reports for exceeding alcohol limits, these account for 14.37% of the total for foreign drivers. However, the percentage of SVGs involving alcohol-related CF for which the foreign driver is at fault is 25%. This shows a direct correlation between the offending behaviour of the foreign driver and the consequences in the number of SVGs for which they are at fault due to this cause.

Reports of distraction among foreign drivers represent 13.78% under article 18 of the General Traffic Regulations (RGCir) and 18.72% under article 76 of the Road Safety Law (LSV)<sup>4</sup> (use of a mobile phone while driving). The responsibility of foreign drivers in SVGs associated with this type of violation is 15.35% in CF - Distraction (DIS), 17.86% in failure to maintain a safe distance (NIS), and 23.29% in tiredness or sleepiness (COS), all of which are related to the CF - Distraction.

Concerning reports of over-occupancy, those filed against foreign drivers account for 43.11% of the total, and they hold significance when correlated with the number of victims. Thus, if we say that 17.83% of fatalities and 17.93% of those seriously injured in SVGs were occupants of a vehicle driven by a foreigner, there is a direct link between the offending activity for this reason and the serious consequences of the resulting road accidents.

This section also includes the offence of not wearing a seat belt or CRS (child restraint system) with a percentage of 21.62% of complaints against foreigners (drivers or occupants), which is directly related to the data on fatalities and serious injuries in vehicles driven by foreign drivers involved in SVGs.

In the case of unlawful overtaking where the foreign driver has an offence rate of 20.51%, this is directly proportional to the 28.6% rate of SVGs with CF - Unlawful Overtaking (AAR) for which foreign drivers were at fault.

Regarding reports against foreign drivers for not respecting the right of way, which accounted for 13.38%, these are related to the percentage of 21.89% of SVGs with the concurrent factor of failure to yield (NRP) for which foreign drivers were at fault.

## ROAD TRAFFIC VIOLATIONS IN CRIMINAL LAW

Crimes against Road Safety are typified in Chapter IV, Title XVII, articles 379 to 385ter, of Organic Law 10/1995, of 23 November, of the Criminal Code (CC).

Articles 379 to 382 and 354 to 385 of the CC define conducts that are already punished as administrative violations, but which the legislator, taking into account the seriousness of the conduct, has decided to punish more severely in the criminal order. Thus, for instance, Article 379.1 of the Criminal Code defines the same conduct as Articles 76.a and 77.a of the Road Safety Law (Articles 42 to 52 of the RGCir<sup>5</sup>) regarding speeding violations, or Article 379.2 of the Criminal Code defines the same conduct as Articles 14 and 77.c of the Road Safety Law, but in this case, concerning the consumption of alcohol and/or drugs.

---

<sup>4</sup> Road Safety Law

<sup>5</sup> General Traffic Regulations

In other words, the actions that the violations against road safety in the CC penalises are actions that compromise road safety and, as in the case of administrative violations, constitute traffic incidents that are the prelude to the occurrence of a road accident, thus considering that there is a direct relationship between road crime rates and accident rates.

For this reason, we have studied the road crime rates of drivers in general and foreign drivers in particular, in the Region of Murcia and in the rest of Spain (Ministerio del Interior, 2022) Crime Statistics Portal of the Ministry of the Interior.

*Table 13. Arrested/investigated road safety violations Spain (period 2014/2021)*

<b>ARRESTED/INVESTIGATED CRIMES AGAINST ROAD SAFETY SPAIN</b>	
<b>NATIONALITY ARRESTED - INVESTIGATED</b>	<b>NUMBER</b>
SPANIARDS	223,540
FOREIGNERS	61,815
TOTAL, ARRESTED/INVESTIGATED	285,355
FOREIGNERS AS % OF TOTAL	<b>21.66</b>

*Source: Crime Statistics Portal (MI). Prepared internally*

*Table 14. Arrested/investigated road safety violations R. Murcia (2014/2021)*

<b>ARRESTED/INVESTIGATED CRIMES AGAINST ROAD SAFETY MURCIA</b>	
<b>NATIONALITY ARRESTED - INVESTIGATED</b>	<b>NUMBER</b>
SPANIARDS	5,204
FOREIGNERS	2,627
TOTAL, ARRESTED/INVESTIGATED	7,831
FOREIGNERS AS % OF TOTAL	<b>33.55</b>

*Source: Crime Statistics Portal (MI). Prepared internally*

As can be seen, in the country as a whole, in the period of time indicated, the percentage of foreigners arrested/investigated for road safety violations was 21.66%, while in the Region of Murcia this rose to 33.55%.

## CONCLUSIONS

Foreigners account for 14.64% of the population of the Murcia region, 9.54% of registered drivers and 11.24% of all vehicle owners.

75.47% of the driving licences issued in Spain to foreigners have been issued by virtue of the different exchange agreements that exist with their countries of origin. Only 24.53% have been obtained after examination at the corresponding Traffic Headquarters.

A foreign driver was involved in 24.62% of all road accidents with casualties, 23.86% of all serious road accidents and 23.94% of road accidents with fatalities. 16.1% of all drivers or pedestrians involved in a serious road accident were foreigners.

A foreign driver was involved in 33.66% of serious road accidents involving HEAD-ON COLLISION and 31.41% of the serious road accidents involving FRONT-SIDE COLLISION.

A foreign driver was responsible for 16.94% of all serious road accidents, but this percentage increased significantly when the factors FAILURE TO YIELD (21.8%), ALCOHOL (25%) and TIREDNESS OR SLEEPINESS (23.3%) were involved in the accident.

Upon analysing the data regarding responsibility in serious road accidents based on the nationality of the driver, it was observed that nationalities with a significant presence in the region's population, such as Moroccans, Ecuadorians, British, and Romanians, all had a responsibility percentage in serious road accidents that exceeded their population share in the region. Among these, Ecuadorian nationals stood out, as despite representing only 1.16% of the population, they were responsible for 2.89% of the serious road accidents.

As a representative figure, it has been shown that, of all serious road accidents in which the concurrent factor was FAILURE TO YIELD, in 16.81% the driver at fault was of Moroccan or Ecuadorian nationality, and the same occurred in 17.11% of serious road accidents with the concurrent factor ALCOHOL, when between the two nationalities they account for only 7.08% of the population of the region.

In relation to the type of accident, we have learned that in 20.79% of serious road accidents involving HEAD-ON COLLISION and in 22.44% of those involving FRONT-SIDE COLLISION, a foreign driver was at fault for the accident.

Throughout this report, the percentages of fatalities and severely injured individuals resulting from this presence of foreign drivers in road accidents have been calculated. It was found that at least one foreign driver was involved in road accidents in which 27.39% of the fatalities and 27.84% of the serious injuries occurred. 17.83% of fatalities and 17.93% of serious injuries in road accidents occurred among the occupants of a vehicle driven by a foreign driver, and 19.1% of fatalities and 19.93% of serious injuries in road accidents occurred as a result of the 16.94% of road accidents in which the foreign driver was at fault.

With regard to violation of regulations, this study has been able to conclude that there is a direct relationship between the traffic violations committed by foreign drivers and the road accidents for which they are at fault, as well as the consequences of said accidents.

It was found that 14.37% of all drink-driving violations were committed by foreign drivers, who were found to be at fault for 25% of all serious road accidents involving drink-driving. They are at fault for 13.78% of distracted driving violations and 15.35% of serious distracted driving accidents. They are responsible for 18.72% of mobile phone violations while driving and 17.86% of road accidents due to failure to maintain a safe distance (rear-end accident) directly related to distracted driving.

While among occupants of vehicles driven by foreigners there is a percentage of 17.83% fatalities and 17.93% severely injured individuals, these drivers are at fault for

43.11% of infractions related to over-occupancy and 21.62% of seatbelt violations. While foreign drivers are responsible for 13.38% of the violations for not respecting the right of way, they are at fault for 21.89% of all serious road accidents that occur for this reason.

In relation to road crime, it was found that in the Region of Murcia foreigners account for 33.55% of all road offenders who have been investigated or arrested. In Spain, this percentage is 21.66%.

It is all this offending activity that could explain the high rates of involvement of foreign drivers in road accidents, the high rates of responsibility for road accidents and the high fatality and injury rates suffered by the occupants of vehicles driven by foreigners.

## PROPOSALS

This study has shown that on many occasions there is a marked disproportion between the data referring to the presence of foreigners in the Region of Murcia (residents, drivers, etc.) and those corresponding to the accident rate and the factors surrounding it.

To blame this disproportion on inadequate training of foreign drivers would be very risky without more precise data to justify this assertion.

However, training being precisely one of the "strategic areas" of the Road Safety Strategy 2030 (trained and capable people), it would be advisable to review the Driving Licence Exchange Agreements that Spain has with some countries and analyse whether driver training in those countries is really comparable to that provided in Spain and whether it is effectively supervised and controlled by authorities that are in a position to prevent fraud in obtaining driving licences.

Elsewhere, given that, in many cases, foreigners living in the Region of Murcia settle in more or less closed communities that are mostly made up of their own compatriots, the results of this study could serve as a tool for the police in charge of traffic surveillance to establish road safety surveillance in these places to correct specific violations, which would make it more effective.

**BIBLIOGRAPHY**

Regional Statistical Centre of Murcia - (CARM - Centro Regional Estadístico de Murcia) (2023). *econet.carm.es*.

Ministry of Economic Affairs and Digital Transformation. (2023). *www.ine.es*.

Ministry of the Interior. (2014). *OM INT/2223/14 regulating the communication of information to the National Register of Traffic Accident Victims*. Madrid: BOE.

Ministry of the Interior. (2022). Crime Statistics Portal Retrieved from <https://estadisticasdecriminalidad.ses.mir.es/publico/portalestadistico/>

National Observatory for Road Safety. (2023). *ARENA 2 application contents manual* Madrid: DGT.

Data Office, DGT. (2023). *Report on drivers and vehicles*.

World Health Organisation (2006). *Road Safety is no accident. Activities manual*.



**José Antonio Mérida Fernández**  
Provincial Traffic Chief of Zaragoza  
Master's Degree in Road Safety and Traffic from  
the Carlos III University of Madrid.  
Senior Management Programme of the National  
Institute of Public Administration.  
Career Civil Servant of the Senior Scale of  
Traffic Technicians.

**RISKS ASSOCIATED WITH  
INTERVENTIONS IN ROAD TRAFFIC  
ACCIDENTS INVOLVING ELECTRIC  
VEHICLES**





## RISKS ASSOCIATED WITH INTERVENTIONS IN ROAD TRAFFIC ACCIDENTS INVOLVING ELECTRIC VEHICLES

**Summary:** 1. INTRODUCTION 2. THE APPEARANCE OF ELECTRIC VEHICLES IN MOTORISATION 3. SPECIFIC RISKS ASSOCIATED WITH ELECTRIC AND HYBRID VEHICLES 4. RESPONSE TO THE LINES OF RESEARCH 4.1. Is there any formal training available in interventions in road traffic accidents involving electric vehicles? 4.2. Is there a specific unified protocol for intervention in road traffic accidents involving this type of vehicle? 4.3. Do emergency personnel have the necessary protective equipment for these interventions? 5. CONCLUSIONS

**Resumen:** La motorización del futuro da paso a vehículos con sistemas de propulsión eléctrica e híbrida. Durante esta transición, impulsada desde las más altas instituciones de la Unión Europea, convivirán vehículos con las nuevas motorizaciones, con vehículos con motores de combustión interna.

La irrupción del vehículo eléctrico e híbrido trae consigo una serie de riesgos específicos, por lo que la realización de un rescate por parte de los equipos de emergencia puede convertirse en un riesgo si no se tienen en cuenta determinadas premisas antes y durante la actuación.

La garantía de una atención rápida y eficaz a la víctima de un siniestro vial vendrá pareja a la seguridad del personal de intervención y, ésta a la dotación de los necesarios equipos de protección, a una adecuada formación de los mismos y a la existencia de protocolos de actuación específicos para los intervinientes.

**“Abstract”:** The motorization the future gives way to vehicles with electric and hybrid propulsion systems. During this transition, promoted by the highest institutions of European Union, vehicles with the new engines will coexist with vehicles with internal combustion engines.

The irruption of electric and hybrid vehicles brings with it a series of specific risk, so that carrying out a rescue by emergency teams can become a risk if certain premises are not taken into account before and during the action.

The guarantee of rapid and effective attention the victim of a road accident will go the intervention personnel and, this, the provision of the necessary protective equipment, adequate training for them and the existence of safety protocols, specific actions for the participants.

**Palabras clave:** Vehículo eléctrico, siniestro vial, servicio de rescate, protocolo de actuación, formación.

**Keywords:** Electric vehicle, road accident, rescue service, action protocol, training.

## 1. INTRODUCTION

One objective of the Road Safety Strategy is to "improve the post-accident response activation mechanisms for coordination between the various services involved to reduce the response times of the emergency services", which requires giving "impetus to protocols and mechanisms for coordination between the various services responsible for rescuing and assisting victims", guaranteeing fast and efficient care, focused on reducing the risk of death or serious injury to people involved in an accident, as well as the safety of the responders and road users. (Observatorio Nacional de Seguridad Vial, 2022)

However, the appearance of electric and hybrid vehicles brings with it a series of specific risks, meaning that the work of emergency teams can become hazardous if certain aspects are not considered before the intervention, since any injury suffered by the intervening responders will result in poor, delayed or non-existent care for the road accident victim.

This study analyses the emergency response training level of responders with regard to handling electric vehicles, and whether they have the necessary protective equipment, safety information and a comprehensive methodology for unified action to equip them with a safety framework for intervention in road traffic accidents that eliminates the concern of first responders due to the appearance of electric vehicles in motorisation.

The specific hazards of handling electric or hybrid vehicles are analysed and a comparison is made between national and international regulations regarding formal training and intervention protocols, as well as an assessment of the current situation and any shortfalls in terms of safety measures and equipment.

The study includes other groups involved as second responders, since they also intervene in both road traffic accidents and breakdowns and removals of vehicles from the road.

## 2. THE APPEARANCE OF ELECTRIC VEHICLES IN MOTORISATION

For more than a hundred years, the predominant propulsion system for vehicles has been the internal petrol or diesel powered combustion engine. In the last 20 years, natural gas, hydrogen and biodiesel, among other alternative fuels, have emerged, with the *Battery Electric Vehicle (BEV)* as the dominant alternative energy vehicle on the market.

The Stockholm Declaration recommends "speeding up the shift toward safer, cleaner, more energy efficient and affordable modes of transport", and the *European Union (EU) Transport White Paper* has among its objectives for the next decade to "halve the use of 'conventionally fuelled' cars in urban transport by 2030; phase them out in cities by 2050; achieve essentially CO<sub>2</sub>-free city logistics in major urban centres by 2030". (Organización Mundial de la Salud, 2020)

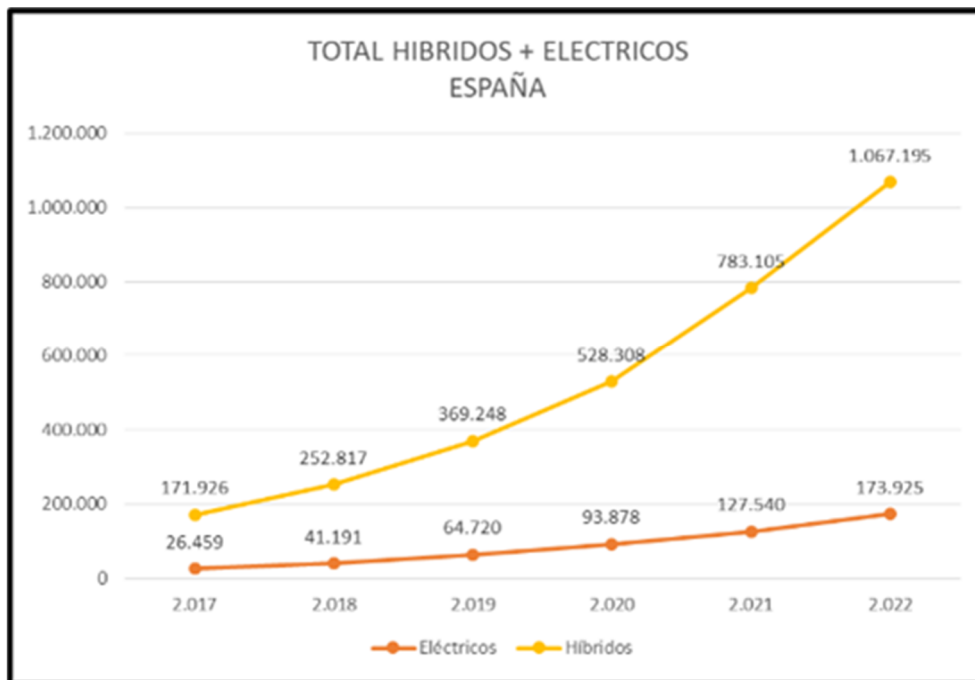
Apart from the controversy triggered by Germany and Italy over the inclusion of e-fuels and the proposal to allow sales of new cars with internal combustion engines after 2035 if they run on carbon neutral fuels, the European Commission's proposed Euro 7 regulation ending the production of CO<sub>2</sub> emitting cars and vans from 2035 onwards has been given the green light, with the aim of achieving climate neutrality in the EU by 2050.

In the opinion of Pérez de Lucía, Director General of the Business Association for the Development and Promotion of Electric Mobility (AEDIVE), given the level of improvement in terms of autonomy, safety and availability of new materials and chemistry, the uptake of electric vehicles will grow significantly in the coming years.<sup>1</sup>

The increased number of hybrid and electric vehicles is notable and unstoppable, and they will gradually replace traditionally fuelled vehicles. An orderly transition is needed, during which vehicles with new electric and hybrid engines will coexist with traditional petrol, diesel and liquefied gas engines, without forgetting the appearance of the hydrogen powered fuel cell electric vehicles once their production and storage problems have been overcome. In addition, the batteries will have a higher capacity and will be smaller, allowing longer journeys without the need to recharge. Faster charging systems and more availability of these on the road network, coupled with longer ranges, are considered the most important factors for the wider deployment of electric vehicles.

The rise of electric and hybrid vehicles has been exponential. According to information from the Vehicle Register of the Directorate-General for Traffic (DGT), the active vehicle fleet in Spain as of December 2022 was 36,269,824. The hybrid and electric fleet consisted of 1,241,120 vehicles<sup>2</sup>, with the number of hybrid vehicles considerably higher than the number of electric vehicles.

**Figure 1**  
*Hybrid and electric vehicle fleet in Spain (2017-2022)*



<sup>1</sup> Telephone interview on 14 March 2023.

<sup>2</sup> The number of vehicles includes *Battery Electric Vehicles (BEV + Range Extended Electric Vehicles (REEV) and Hybrid Electric Vehicles (HEV + Plug-in Hybrid Electric Vehicles (PHEV) and Plug-in Hybrid Electric Vehicles (PHEV)*.

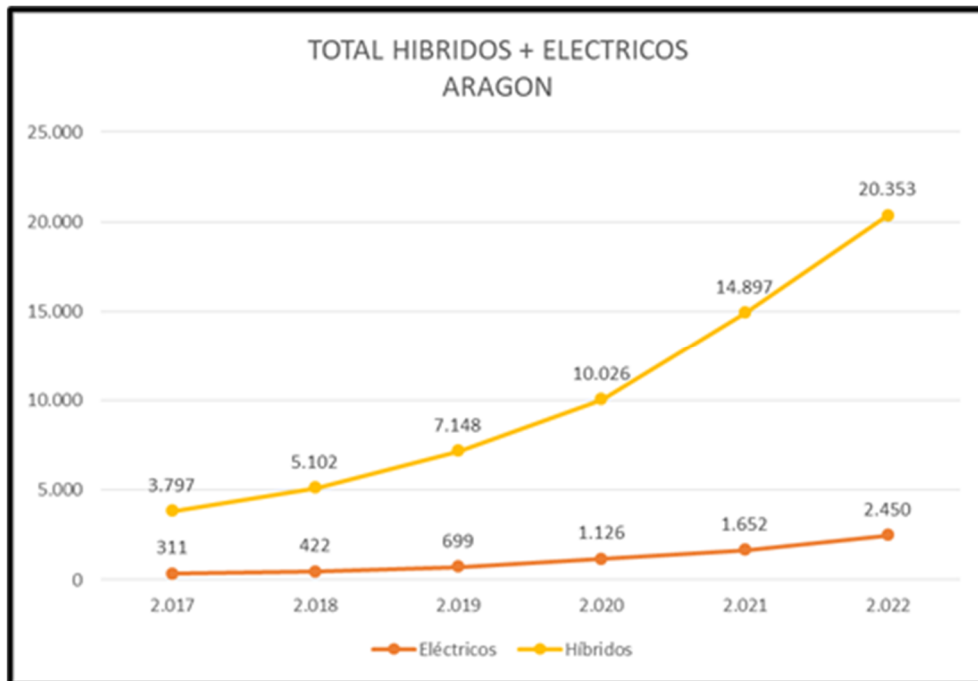
By vehicle segment, passenger cars hold a leading position in terms of the number of both electric and hybrid vehicles. Electric vehicles are followed by vans, motorbikes and mopeds, whilst those heavy vehicles (trucks and buses) in this segment is irrelevant with respect to the total fleet. In the case of hybrid vehicles, the fleet consists almost entirely of passenger cars and to a lesser extent, vans. Table 1 shows the figures and evolution over the last six years.

**Table 1**  
*Number of hybrid + electric vehicles in Spain by vehicle segment.*

	2017	2018	2019	2020	2021	2022
<b>Vans</b>	3457	5564	12865	25439	46693	70055
<b>Lorries</b>	1337	1933	2706	4203	5936	8290
<b>Buses</b>	436	643	1168	1490	2100	2613
<b>Passenger cars</b>	179549	265045	384630	547794	803906	1094741
<b>Motorbikes</b>	8264	11423	17926	24907	29047	38185
<b>Mopeds</b>	3686	7145	11621	14647	18599	21977
<b>Other vehicles</b>	1656	2255	3052	3706	4364	5259
<b>Total</b>	198385	294008	433968	622186	910645	1241120

In Aragon, the geographical area studied, Figure 2 shows the evolution and growth of the hybrid and electric vehicle fleet, which has been exponential over the last six years, with the number of hybrid vehicles outnumbering electric vehicles, in a similar way to national trends.

**Figure 2**  
*Hybrid and electric vehicle fleet in Aragon (2017-2022)*



In terms of the number and evolution of the vehicle fleet in Aragon, mirroring national trends, most electric and hybrid vehicles are passenger cars, followed by vans, with more

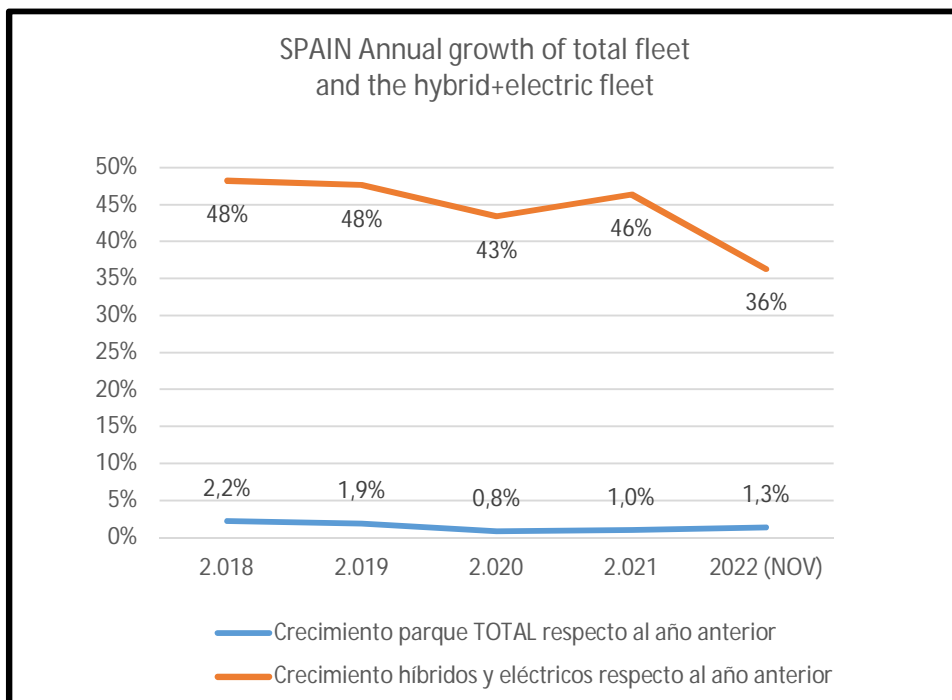
hybrid than electric vehicles. Table 2 shows the figures and evolution of the fleet by vehicle segment.

**Table 2**  
*Number of hybrid + electric vehicles in Aragon by vehicle segment.*

	2017	2018	2019	2020	2021	2022
<b>Vans</b>	44	65	152	338	750	1051
<b>Lorries</b>	26	31	49	60	85	102
<b>Buses</b>	4	6	45	62	62	75
<b>Passenger cars</b>	3860	5224	7285	10265	15034	20675
<b>Motorbikes</b>	81	87	118	172	266	455
<b>Mopeds</b>	44	54	122	152	194	235
<b>Other vehicles</b>	49	57	76	103	158	210
<b>Total</b>	4108	5524	7847	11152	16549	22803

In terms of annual growth, the fleet of electric and hybrid vehicles has grown significantly over the last few years in relation to the active fleet. Around 48%, with the exception of the year of the Covid pandemic, although there was only 36% growth over the last year. This could be due to user uncertainty resulting from EU policies with the approval of the Euro7 regulation and the controversy unleashed by some member countries regarding the moratorium on the permanent elimination of combustion vehicles in 2035 and the appearance of synthetic fuels known as e-fuels.

**Figure 3**  
*Growth of the total fleet and hybrid + electric vehicles.*



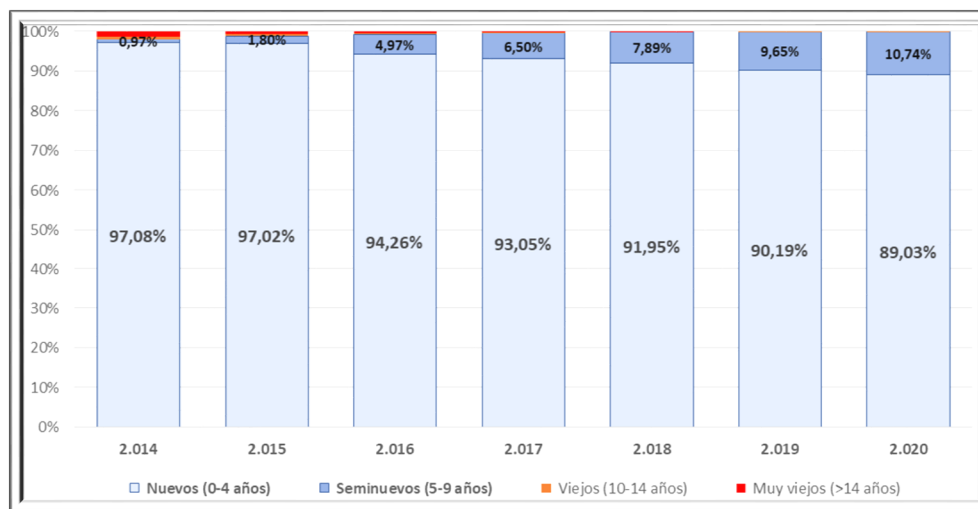
If we look at electric vehicle registrations in several European countries in 2022, particularly in passenger cars, which account for most of the fleet, there are significant differences between countries. While in Norway, electric cars account for almost 80% of

sales and the number of electric vehicles in Sweden is increasing by more than 100%, Spain is trailing far behind other EU countries like Germany, the United Kingdom and France in terms of electric vehicle deployment, and is one of the slowest countries to move towards electric mobility.

As for the age of the fleet, electric vehicles, in the range of new passenger cars, i.e. between 0 and 4 years old, have fallen from 97.08% in 2014 to 89.03% in 2020. Conversely, pre-owned passenger cars (5 to 9 years old) now account for 10.74%, compared to 0.97% in 2014. The number of passenger cars classed as old (10-14 years) and very old (more than 14 years) has declined since 2014 and has become virtually irrelevant today.

If the fleet of electric passenger cars, the most numerous by vehicle segment, ages in a similar proportion to that of petrol and diesel vehicles, this could pose an additional problem, since although electric cars require less maintenance than traditional fuels, the situation is quite different if the battery is damaged, even slightly, after an accident, because these defects are more difficult to repair and batteries are currently expensive to replace.

**Figure 4**  
*Age of the fleet of passenger cars with electric motors.*



**Note:** evolution of the age of the electric passenger car fleet between 2014 and 2020. Source: Vehicle Research Institute Centro Zaragoza.

As the electric vehicle fleet grows, so do the new challenges we have to address. This applies not only to drivers, but also other stakeholders such as insurance companies, repair workshops, roadside assistance services and Authorised End-of-Life Vehicle Treatment Centres (ELVTCs) and, of course, emergency services.

On the other hand, there is some controversy about the safety of these new vehicles. While Euro NCAP considers electric cars to be as safe, if not safer, than combustion cars, in the United States, the National Transportation Safety Board (NTSB) considers electric



cars to be a driving hazard, mainly because they are heavy and the consequences of collisions with lighter vehicles.

Álvaro Gómez Méndez, Director of the DGT's National Road Safety Observatory (ONSV), believes that although some scientific work has already been published, more research based on real accident data is needed, as there is uncertainty about the differences between electric and traditional combustion vehicles in terms of the risk to vehicle occupants and pedestrians and occupants of other vehicles, because although, a priori, the greater mass of the electric vehicle means less risk to its occupants and greater risk to third parties, differences in driving styles can compensate for the mass effect.<sup>3</sup>

It is not that electric vehicles are more dangerous to traffic per se, but when a heavier vehicle collides with a lighter vehicle, the lighter vehicle bears the brunt of the collision because it absorbs more kinetic energy. The fact that they are so heavy, more than 2,000 kg in most cases, combined with the absence of noise, means that EVs pose an additional risk of pedestrians being run over. Not to mention the fact that they have power outputs of over 400 hp, which makes driving these vehicles more complex, as they accelerate faster than expected. The insurance company AXA claims that electric cars are involved in a higher number of accidents, 50% more than conventional cars, to be precise. (Franco, 2022)

From an analysis of information collected with data on the national and Aragonese level vehicle fleet, and the main accident and injury figures on the involvement of electric vehicles on interurban roads and in urban areas in the two territorial areas, we observe that a priori, it would appear that the number of accidents involving electric vehicles on interurban roads in Aragon is greater in the case of electric vehicles with respect to the active fleet than the accident rate with respect to the fleet of other vehicles, although in terms of accidents involving victims, it is similar in both cases. Similar results are obtained from the national comparison.

This is not the case in urban areas, where the situation is reversed, with a similar accident rate for the respective fleet, but a higher rate of accidents with casualties when electric vehicles are involved.

---

<sup>3</sup> Telephone interview on 1 April 2023.

**Table 3**  
*Vehicle accidents in Aragon and Spain on interurban and urban roads.*

			Electric vehicles	Rest	TOTAL
<b>INTER URBAN 2022</b>	ARAGON	Fleet	22,803	949,477	<b>972,280</b>
	SPAIN		1,241,120	36,269,824	<b>37,510,944</b>
	ARAGON	Accidents	220	5,832	<b>6,052</b>
	SPAIN		4,032	99,917	<b>103,949</b>
	ARAGON	% of the Fleet	0.96%	0.61%	<b>0.62%</b>
	SPAIN		0.32%	0.62%	<b>0.28%</b>
	ARAGON	Accidents with casualties	34	934	<b>968</b>
	SPAIN		1,039	22,698	<b>23,737</b>
	ARAGON	% of Accidents	15.45%	16.02%	<b>15.99%</b>
	SPAIN		25.77%	22.72%	<b>22.84%</b>
	ARAGON	Accidents	99	3,473	<b>3,572</b>
	SPAIN		4,962	106,533	<b>111,495</b>
<b>URBAN 2022</b>	ARAGON	% of the Fleet	0.43%	0.37%	<b>0.37%</b>
	SPAIN		0.40%	0.29%	<b>0.30%</b>
	ARAGON	Accidents	95	1,187	<b>1282</b>
	SPAIN	with casualties	4,786	41,826	<b>46,612</b>
	ARAGON	% of Accidents	95.96%	34.18%	<b>35.89%</b>
	SPAIN		96.45%	39.26%	<b>41.81%</b>

### 3. SPECIFIC RISKS ASSOCIATED WITH ELECTRIC AND HYBRID VEHICLES.

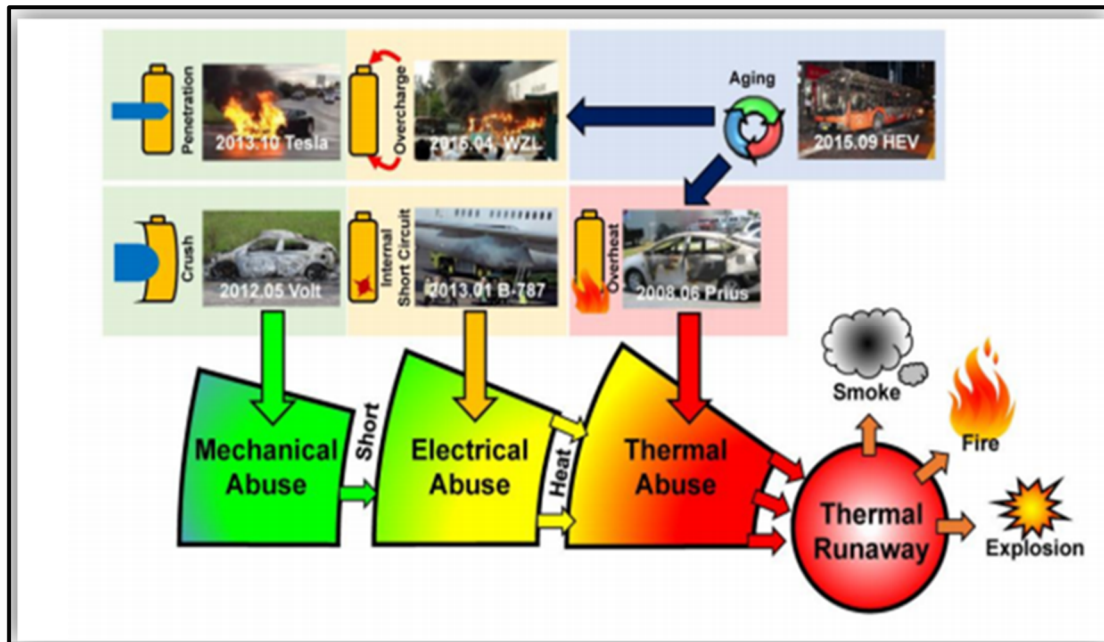
Changes in propulsion technology lead to changes in risks, which although neither greater nor lesser, are different. Due to their characteristics, both electric vehicles and hybrid vehicles entail a series of associated risks, among which we are electrical, chemical, fire and explosion risks, all three of which are equally dangerous.

Researchers have concluded that the flammable solvents in lithium-ion batteries are just as dangerous as the petrol or diesel solvents used in conventional vehicles. (Sthephens, y otros, 2017)

The main safety problem of these batteries is due to a phenomenon called thermal runaway, which follows a mechanism during which the materials of the battery components undergo a chain decomposition, flammable gases are released, causing a build-up of pressure and temperature inside the battery that can eventually trigger a difficult-to-control fire or an explosion.

Feng summarises the abusive conditions that can lead to thermal runaway, which include mechanical abuse, electrical abuse and thermal abuse, with internal short-circuiting being the most common characteristic. (Feng, y otros, 2018)

**Figure 5**  
Specific risks associated with handling an electric vehicle.



**Source:** Vehicle Research Institute Centro Zaragoza, retrieved from (Feng, et al., 2018, pp. 246-267)

Thermal runaway may be due to mechanical or thermal failure inside the battery. A faulty charging system or a vehicle collision resulting in crushing or penetration of the battery pack can cause overcharging or excessive discharge leading to high temperatures and thermal runaway.

Electrical risk is the risk caused by electrical energy, including not only the probability of suffering an electric shock, but also the risk of suffering burns due to electric shock or electric arc, falls or blows as a consequence of electric shock or electric arc, fires, or explosions.

On the other hand, the chemical risk is caused by the presence of highly reactive chemicals inside the high-voltage battery. In the event of a collision or traffic accident, the chemicals in the battery may leak out.

Among the toxic gases created and released, the most dangerous is the lithium hexafluorophosphate in the electrolyte, whose formation increases with temperature and which in contact with water forms the highly toxic and corrosive hydrofluoric acid HF, which can penetrate the skin and cause deep injuries to the body, with even fatal consequences. (Tacheová, 2022)

**Figure 6**  
*Injuries caused by hydrofluoric acid.*



**Source:** Centro Zaragoza Technical Magazine. (Tacheová, 2022, pág. 48)

Electric and hybrid vehicles are equipped with several safety systems to prevent batteries from burning and to prevent the risk of electrocution in the event of an accident. If a sensor detects that a collision has occurred or the vehicle's airbag or pretensioners are activated, the high-voltage circuit stops releasing power, thus preventing electrocution and a possible short circuit that could cause a fire. Battery designs must provide for thermal management through a cooling system that absorbs and dissipates heat from the lithium-ion battery packs. (Vervecken, 2021)

Depending on the type of worker who must handle or repair an accident or breakdown of an electric vehicle, they will be exposed to one type or another of the mentioned risks. That is why the appropriate technical, organisational and personal measures to be taken to avoid such risks must be analysed in each case.

Essential aspects like training, information, dissemination, adequacy of facilities, intervention procedures, as well as equipment and tools, require consideration. (AEDIVE y GANVAM, 2020)

Based on a research study into real traffic accidents after which electric vehicles caught fire, the NTSB identified the safety risks to emergency services from high-voltage lithium-ion vehicle batteries: fire, electric shock, thermal runaway and grounding power. (National Transportation Safety Board (NTSB), 2020)

In a study into the training and education of emergency services in the intervention of road accidents with electric propulsion vehicles, the National Fire Protection Association (NFPA) identified the risks, procedures and safe methodologies in this segment of vehicles. It was determined that hybrid and electric vehicle collisions result in potential

fatalities and serious injuries at the scene of the accident for both responders and vehicle occupants, as well as the potential for post-incident injury, death, or damage to crash investigators, towing and rescue personnel.

Potential hazards identified by collisions involving these vehicles are described in the National Highway Traffic Safety Administration's (NHTSA) "Interim Guidance for Electric and Hybrid-Electric Vehicles Equipped With High-Voltage Batteries", and include stalled power, silent movement, toxic and flammable gases emanating from a High Voltage (HV) battery, thermal runaway, battery fires, and the possibility of electric shock from exposed high voltage cables and components. (Klock, 2013)

According to the US Department of Transportation (DOT), this new hybrid-electric technology is, in itself, no more dangerous to emergency services and the public than conventional petrol or diesel internal combustion engine vehicles. It says that the emergency services lack training and experience handling electric vehicle incidents, compared to their more than a hundred years of familiarity with internal combustion vehicles. (Klock, 2013, pág. 7)

When the emergency services have finished their work, particularly if there has been a previous battery fire, there is still a risk of fire, as the batteries may release toxic gases and even re-ignite, posing a risk to the roadside assistance services while towing of the vehicle from the accident site to the repair shop or ELVTC, where the risk will continue during storage, handling and, where appropriate, recycling.

To summarise, during interventions at incidents and road traffic accidents involving electric vehicles with lithium-ion batteries, emergency personnel and second responders, including both vehicle transport, repair, storage and recycling personnel, there are several safety risks related to electric shock, thermal runaway, battery ignition and re-ignition, and stranded power.

Rask et al (2020) reviewed the risks and hazards associated with stranded energy left in HV lithium-ion battery systems, with the aim of developing a tool to allow non-expert personnel, such as tow truck drivers, to assess and deactivate an HV battery system after an accident. The problem was that the tool required a direct connection to the internal battery modules via an HV port and, in all likelihood, the Battery Management System (BMS) and/or HV port would be damaged as a result of an accident or thermal runaway, making access impossible or very problematic. (National Transportation Safety Board (NTSB), 2020, pág. 61)

According to the European Trade Association for the fire safety and protection industry Euralarm (2022), the mere presence of lithium-ion batteries represents a considerable fire risk and "to limit the likelihood and consequences of a lithium-ion battery fire, a comprehensive strategy including risk prevention, early detection, intervention actions, active extinguishing and physical separation should always be adopted".

#### **4. RESPONSE TO THE LINES OF RESEARCH**

The question we asked ourselves when undertaking this research is whether the emergency services are adequately trained to intervene in a road accident involving

electric vehicles, and from this starting question we posed three derived questions that we will now analyse.

#### 4.1. Is there any formal training available in interventions in road traffic accidents involving electric vehicles?

The Law on Occupational Risk Prevention (LPRL)<sup>4</sup> requires necessary and sufficient training, specifically focused on the functions performed by the worker. The Royal Decree on electrical risk<sup>5</sup>, which is mainly focused on general electrical installations and not on the particularities of electric vehicles, follows the same lines.

As a result of this research we were able to verify the existence of regulatory standards governing specialisation courses and qualifications in hybrid and electric vehicle maintenance, aimed at sectors such as transport, vehicle rental and manufacturing, as well as the necessary qualifications required of ELVTC professionals who are responsible for handling electric vehicles, which, although they may offer curricular content, do not meet the specific needs of the emergency groups responding to a road accident.<sup>6</sup>

We found some training centres with specific approved courses in the handling and intervention of high-voltage vehicles, and in some cases even certifiers such as TÜV SÜD, although the training is oriented towards the needs of technicians to carry out safe repairs and on end-of-life vehicles.

The Vehicle Research Institute Centro Zaragoza and the Savyt Rescue Institute are approved centres in Spain that also offer first level training for emergency service professionals among other groups.

Some companies, such as Irizar e-mobility, offer specific training for drivers of the buses they manufacture.

The above-mentioned regulations aside, there is no formal training in Spain in handling battery electric and hydrogen fuel cell vehicles by the emergency services.

In other EU countries, such as Germany and France, there is regulated training available<sup>7</sup>, and although it applies exclusively to those countries it can serve as a guide for the purposes of establishing regulated training in Spain. In fact, the programmes

---

<sup>4</sup> Articles 18 and 19 of Law 31/1995, of 8 November, on Occupational Risk Prevention (Official State Gazette (BOE) no. 269, of 10 November).

<sup>5</sup> Article 5 of Royal Decree 614/2001, of 8 June, on minimum provisions for the protection of the health and safety of workers against electrical hazards (Official State Gazette (BOE) no. 148, of 21 June).

<sup>6</sup> Royal Decree 265/2021, of 13 April, on end-of-life vehicles and amending Annex VI of the General Vehicle Regulations, approved by Royal Decree 2822/1998, of 23 December (Official State Gazette (BOE) no. 89, of 14 April); Royal Decree 281/2021, of 20 April (Official State Gazette (BOE) no. 111, of 10 May) and Royal Decree 109/2022, of 8 February (Official State Gazette (BOE) no. 34, of 9 February), establishing specialisation courses in maintenance and safety of hybrid and electric vehicle systems.

<sup>7</sup> The German formal training is DGUV 200-006 (2012), which sets training criteria, as well as qualification levels and working methods. Accreditation is obtained by examination at the German Chamber of Commerce.

The French standard is NFC 18-550, developed by the U21 Commission for the Prevention of Electrical Accidents (2015), approved by the French Association for Standardisation (*Association Française de Normalisation, AFNOR*), based on regulatory requirements and procedures to ensure the safety of people from electrical hazards.



offered by the main training centres are classified into three levels of training established by both German and French standards, the first level being applicable to emergency personnel.

In the USA, having identified a gap in fire service training on new propulsion technologies, the NFPA developed a comprehensive training programme along with an on-scene quick reference manual in a variety of formats and media<sup>8</sup>, based on research conducted by Dr Jamie L. McAllister and Brian McAllister (2019) who evaluated the current approaches utilised in the fire service for proficiency training and continuing education. The approaches used by parallel professions (emergency medical providers, nurses, law enforcement officers, and teachers) were also assessed, concluding that to ensure they are up to date with changes as they occur and to assess the challenges in implementing uniform training requirements, a model of continuous training for first responders is needed.

In interviews with those responsible for first and second response in road traffic accidents, associations, researchers and experts<sup>9</sup>, the Director of the Guardia Civil Traffic School, Colonel José Lope Galiana Fernández-Nespral and the Second Chief of the Aragón Traffic Sector of the Guardia Civil, Commander Raúl Castillo, are of the opinion that the existing regulatory framework for this type of vehicle has focused on approval and safety requirements and on the necessary infrastructure, but neglects the safety aspects of the handling of these vehicles by accident response or rescue personnel, and with regard to training, they acknowledge a lack of training for the group of agents.

With regard to surveys carried out among first responders to road traffic accidents,<sup>10</sup>, although the sample is small, the data is significant, as 60% of the officers surveyed stated that there is a lack of this specific training and the remaining 40% that there is only limited training.

In addition to confirming this lack of training in the emergency services, the Deputy Public Prosecutor for Road Safety in Cordoba, Ms Natalia Izquierdo Siles, warns of the risks that first responders take due to insufficient training in the new propulsion systems.

The Managing Director of the Professional Association of Firefighters Technicians (APTB), Mr Gabriel Muñoz Simal, and the Head of Intervention of the Fire Department of Zaragoza City Council, Mr David Galve Marzal, point to the slow response of training to the new scenarios caused by electric vehicles, which is offset by the experience and general training of firefighters, as well as the lack of a standard that establishes a basic safety design for all manufacturers, an issue that we have seen is also recurrent in other

---

<sup>8</sup> NFPA educational offerings are available on the NFPA website at [www.EVSafetyTraining.org](http://www.EVSafetyTraining.org)

<sup>9</sup> In March and April 2023, 22 personal interviews were carried out by telephone and e-mail with the heads of first response groups (ATGC and Local Police, fire brigades and health services) and second response groups (roadside assistance, road maintenance), as well as other groups that handle these vehicles, such as vehicle repair workshops and ELVTCs, in addition to government officials, associations, researchers and experts related to electric vehicles.

<sup>10</sup> A survey was carried out among 166 professionals from the Guardia Civil, Local Police, Fire Brigade and 112 Health Service in the province of Zaragoza, using a form with six questions with predetermined responses.



countries. In the survey of firefighters from the City Council and the Zaragoza Provincial Council, almost 63% and 90%, respectively, indicated a lack of specific training.

Similarly, local police officers and health personnel say there is a lack of training, a fact corroborated by 73% of the officers surveyed and 100% of the health personnel in the respective surveys. Both the Chief Intendant of Traffic and Road Safety of the Local Police of Zaragoza City Council, Mr Juan M. Maroto Valer, and the head of Security and Civil Protection (112) of the Government of Aragon, M. Miguel A. Cavero, state that there is an absolute lack of specific training in intervention and handling of this type of vehicle. Mr Rafael Benavente, Chief Engineer of the State Roads Conservation and Exploitation Service, shared this opinion with regard to the group of road maintenance workers, whose training is scarce or even non-existent.

The presidents of the Aragonese Roadside Assistance Association (AARAC), Mr José Alonso Doto, and the Zaragoza Vehicle Repair Workshops Association (ATARVEZ), Mr José A. Mora Sotoca, both point to a lack of training as well as a lack of regulation, although the president of the Association of Scrapyards of Aragon (ADESAR), Mr José A. Mora Sotoca, said that there was a lack of training and a lack of regulation of their own. Mrs M<sup>a</sup> Antonia Cebollada mentioned the existence of initiatives from different sectors vis-a-vis a specialised training offer, which will become established as the use of this type of vehicle becomes more widespread.

In the interview with Mr José M. Cáncer Abóitiz, General Manager of the CESVIMAP, the Center for Experimentation and Road Safety MAPFRE, and Mr Guillermo Magaz Pilar, General Manager of the Spanish Association of Collaborating Entities of the Administration in the Technical Inspection of Vehicles (AECA-ITV), they point out an absence of regulations and consider that there is a lack of specific training.

In the same vein, the engineer responsible for electric vehicles and mobility at the Zaragoza Centre's Institute for Vehicle Research, Ms Ana Olona, and the Assistant Deputy Director General for Vehicles of the DGT, Ms Susana Gómez Garrido, advocate moving towards Europe-wide legal and regulatory standards, recognising the lack of a unified training standard at national level.

During the research, we also detected a lack of training and information among drivers. We have already mentioned that driving this type of vehicle is more complicated and the potential consequences on the accident rate, with the consequent need for intervention by rescue or roadside assistance services.

When analysing the surveys and interviews carried out with professionals from the world of driver training and DGT officials and professionals and experts in the field of road safety, we observe that not only is there a lack of training for road users, but also a lack of information about this vehicle segment.

While the National Vice-President of the National Confederation of Driving Schools (CNAE), Mr Sergio Olivera, considers it necessary to re-educate drivers in view of the different behaviour of these vehicles when driven, the Director of the ONSV considers that, although the level of training of road users is low, re-education is not a viable solution, and that action should be taken through information and awareness campaigns,

with the participation of car dealers, as well as including training on driving electric vehicles in the scope of Private Driving Schools (EPC).

From the research carried out, we can conclude that, although there is a certain amount of training offered by different associations and organisations in relation to electric vehicles, the existing formal training is aimed more at professionals in vehicle repair workshops and ELVTCs than at first and second responders in emergency services.

As for the emergency services, with the exception of the fire service, whose general training may offset a lack of specific training required for interventions with this type of vehicle, the others involved lack specific training, such as the medical and local police forces, and although the ATGC has just designed a training programme, it has not yet been implemented to cover all its members, a matter which should be addressed as soon as possible.

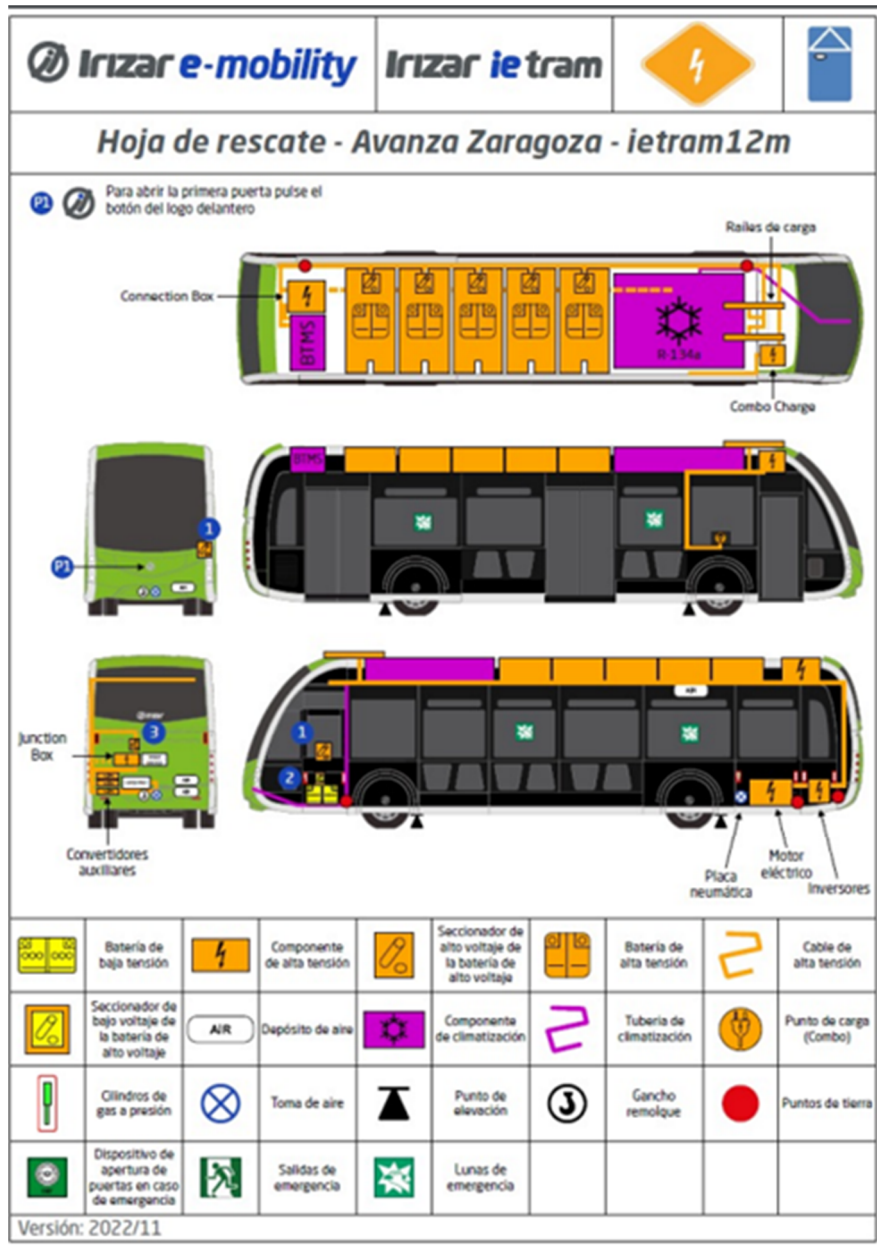
#### 4.2. Is there a specific unified protocol for intervention in road traffic accidents involving this type of vehicle?

The Professional Association of Rescue in Traffic Accidents (APRAT) and the DGT have published a Basic Manual that includes the Unified Rescue Procedure. There are numerous documents of varied content created by different emergency services throughout Spain, which, in different formats and to different extents, cover the different phases of the unified protocol for rescue in traffic accidents, adapted, more or less, to the peculiarities of electric vehicles, but there is no unified protocol for joint action. Some internal procedures of different regional intervention groups have been analysed. (Jimenez Onetti, et al., 2015; Bonilla Blas, et al., 2019; Mateo Fernández, 2021; Agencia de Seguridad y Emergencias Madrid (ASEM), 2019).

In turn, increasingly safer vehicle designs pose new challenges for rescuing accident victims trapped in their vehicles, as does the appearance of new forms of propulsion, such as that used by hybrid and electric vehicles. Finding and disconnecting the batteries in these cars is an additional problem, which may be aggravated by the deformation of the vehicle structure as a result of the road accident.

Rescue sheets, prepared and distributed by vehicle manufacturers for each model, help to identify risks. The Europe-wide use of a standardised rescue sheet is vital in situations where every second counts, avoiding unnecessary delays by providing rescue teams with the information they need.

**Figure 7**  
*Rescue sheet 100% electric Irizar ietram city bus.*



Source: Avanza Zaragoza.

Euro NCAP, in collaboration with the International Association of Fire and Rescue Services/Comité Technique International de prévention et d'extinction du Feu (CTIF), developed the Euro Rescue application that gives emergency services quick access to the relevant vehicle information.<sup>11</sup>

<sup>11</sup> The "Euro Rescue" application is available for both Apple ([https://lnkd.in/gZKN\\_Qd](https://lnkd.in/gZKN_Qd)) and Android (<https://lnkd.in/gPPhpCY>). There is also Moditech's Crash Recovery System application for Apple (<https://apps.apple.com/app/crash-recovery-system/id1468268628?ls=1>) and for Android (<https://play.google.com/store/apps/details?id=crs.mobile.moditech.com>)

Back in 2010, the NFPA co-hosted a National Summit with SAE Internacional (Society of Automotive Engineers, SAE) to address issues related to electric vehicle safety codes and standards, infrastructure, and emergency personnel. The idea was for key individuals, organisations and agencies to develop a common understanding of how to ensure electrical and fire safety standards for electric vehicles. An alternative fuel vehicle safety summit was held again in 2016, in the face of unstoppable growth, concluding that "the most important thing for emergency responders is a clear and rapid understanding of all the hazards they face, especially during an emergency, when accurate real-time information is critical". (Grant, Alternative Fuel Vehicle Safety Summit, 2016)

Based on their research, the American organisations NFPA and NTSB identified the safety risks for emergency services, stating that the main problem is the large amount of vital safety information on a car that a rescuer needs to access when responding to an accident to contain the risk and adopt integrated protection and intervention solutions, developing a quick reference field guide (Electric/Hybrid Vehicle Emergency Field Guide, EFG) and a series of best practice recommendations and common procedures for the protection of emergency responders.<sup>12</sup>

The NFPA has carried out research to assess the differences between internal combustion engine vehicle fires and fires associated with electric vehicles. Aimed at strengthening the NFPA Electric Vehicle Emergency Field Guide, the project sought to develop best practices for emergency response procedures for electric vehicle battery incidents. (Long Jr., Blum, Bress, & Cotts, 2013)

The NFPA keeps a collection of Emergency Response Guides (ERGs) from more than 35 alternative fuel vehicle manufacturers, which can be downloaded free of charge. (U.S. Fire Administration (USFA), 2022)<sup>13</sup>

Euralarm (2022) produced a guide to integrated fire protection solutions for lithium-ion batteries for safety, security, fire fighting and fire suppression professionals in relation to the use, storage and transport of lithium-ion batteries and their fire risk.

Based on work carried out by Katharina Wöhrl et al (2021) of the CARISSMA Institute of Electric, Connected and Secure Mobility (CECOS), European countries like Germany produced a document with recommendations for handling electric vehicles in accidents, which, in addition to analysing the risks for rescue services, establish the General Procedures for Traffic Accidents with BEVs and the rescue sequence from the emergency call to the towing and subsequent recycling of the vehicle. France has also developed a series of guides and documents on recommendations and handling of electric vehicles involved in accidents.

Organisations such as the CTIF and SAE International (2019), respectively, developed ISO 17840 and SAE 2990 Recommended Practice, which aim to establish a standard format for emergency response guidelines and a set of best practice recommendations and common procedures for the protection of emergency responders.

---

<sup>12</sup> The *Electric/Hybrid Vehicle Emergency Field Guide (EFG)* contains only the most important BEV safety information and is available as a printed manual and on smart mobile devices, in a highly indexed and in a consistent format for each manufacturer.

<sup>13</sup> <https://www.nfpa.org/education-and-research/emergency-response/emergency-response-guides?l=515>

Because the design of electric vehicles is different for different makes and models, and because rescue and firefighting responders need practical emergency guidance specific to the characteristics of each electric vehicle, the NTSB (2020) recommends compliance with ISO 17840 in manufacturers' electric vehicle ERGs.

In addition to identifying the risks faced by emergency responders, a 2020 NTSB investigation into the safety risks faced by emergency services when responding to vehicles with high-voltage lithium-ion batteries<sup>14</sup> identified two safety gaps: inadequacy of vehicle manufacturers' emergency response guidelines to minimise the risks posed by battery fires for first and second responders, and gaps in safety standards and research related to batteries in high-speed collisions. (National Transportation Safety Board (NTSB), 2020)

The survey of the 166 first responders (officers, firefighters and health workers) is virtually unanimous. All those responsible for first and second response emergency teams interviewed highlighted the need for a unified and coordinated action protocol between the different intervening agents.

The Director of the Traffic School considers creating this protocol and training to be essential, especially since on many occasions the Guardia Civil officers are the first to arrive at the scene of an accident when immediate assistance is required, and the Managing Director of APTB recommends the extension of the state-level protocol to the European level.

Ms Susana Garrido of the DGT considers it appropriate to have a unified, coordinated and periodically updated protocol with the innovations of this type of propulsion systems and Mr Jesús Monclús, Director of the area of prevention and road safety of Fundación MAPFRE, sees an opportunity to work on standard protocols and training in the EU and even at a more international level.

The Deputy Public Prosecutor for Road Safety specifies that in addition to the common and basic sections aimed at all first responders to guarantee their safety in the intervention, it should include the corresponding sections that respect the specificities of each group, especially firefighters, as they focus on reducing or eliminating the risks generated by these vehicles.

ATARVEZ and ADESAR consider a unified protocol to be necessary, AECA-itv states that it does not have a specific procedure, accessing information through commercial programmes and platforms, and AARAC considers it absolutely necessary to establish a unified action protocol that coordinates towing services with other agents and provides information that none of the roadside assistance companies surveyed by the association itself has been informed of, knows of or applies a protocol, whether internal or coordinated, between the different first or second responders.

Centro Zaragoza researcher, Ms Ana Olona, believes that the information provided by the manufacturers is adequate, although it is true that as there is no universal and common location for the maintenance connector to disconnect the HV, it is necessary to rely on the Rescue Sheet and stresses the importance that when the damaged electric vehicle

---

<sup>14</sup> Investigation Report NTSB/SR-20/01



arrives at the workshop, information is provided on the actions that have been carried out on it, allowing the workshop to know what has been done to the vehicle, which will help said personnel to adopt the most suitable protection and/or prevention measures before handling the electric vehicle or its components where appropriate.

Pérez de Lucía, from AEDIVE, considers that there is a lack of sufficient information to inform the different groups about the available documentation and how to access it.

In the US emergency community training project developed by the NFPA, one of the objectives of the project was to establish better communications between vehicle manufacturers and emergency services to improve access to necessary safety information. (Klock, 2013)

We can conclude that information is made available to the different groups through the rescue sheets, but apart from the APRAT/DGT Basic Manual, there is no specific protocol for intervention in road traffic accidents involving electric or hybrid vehicles. There is rather a willingness on the part of some emergency services to regulate these procedures more than the existence of real protocols or guidelines, which in no case are unified, coordinated or generalised.

This is far from the research and studies carried out by American agencies NFPA and NTSB, as well as the summits for the development of common knowledge, safety codes and standards, the approval of a Rapid Emergency Guide, compilation of critical information and manufacturers' guides, continuous training of the emergency services and, ultimately, common procedures for action.

All the agents involved in the intervention were almost unanimous on the need for a unified action protocol, a protocol that should extend second responders, an opinion supported by virtually everyone interviewed, belonging to different fields, some of them including the need for this unified protocol to be even at a European level.

#### 4.3. Do emergency personnel have the necessary protective equipment for these interventions?

All occupational health and safety measures must comply with the general principles of risk prevention set out in the LPRL and other applicable regulations, applying the principle of risk minimisation without forgetting that the lack of qualifications and inadequate instructions to employees is a source of danger.

Depending on which professionals must deal with or repair an electric vehicle damaged in an accident, they will be exposed to one type or another of the risks indicated above. That is why the appropriate technical, organisational and personal measures to be taken to avoid such risks must be analysed in each case.

There is mandatory and recommended Personal Protective Equipment (PPE) the safe handling of an electric or hybrid vehicle. Anyone who must handle or repair an electric or hybrid vehicle that has been involved in an accident must use the following PPE:

dielectric protective gloves and footwear, impact goggles and Self Contained Breathing Apparatus (SCBA) for firefighters.<sup>15</sup>

Surveys of first responders show that, with the exception for firefighters, most officers and health workers believe that they should be provided with the necessary PPE when the intervention involves electric vehicles.

The Road Safety Prosecutor interviewed said that officers should wait for the fire brigade to arrive, proceeding in the meantime to identify the vehicle, immobilise it if necessary and establish a safety zone, considering it feasible to have dielectric gloves for specific occasions.

The general protocol of the Basic Traffic Accident Rescue Manual establishes that if ATGC officers are the first to arrive on the scene of the accident (as is usual on interurban roads) and in the event of imminent risk to the victim, the victim must be rescued and located in a safe area until the arrival of the Fire Brigade or Medical Services. We are faced with the dilemma of a necessary rescue intervention and a lack of protection for the agent due to the lack of even a minimum of protective equipment against electrical risk.

The study shows that dielectric protective gloves that protect against contact, even if accidental, with a conductive element, as well as goggles that prevent possible burns to the face caused by an electric arc, are two items of PPE that officers involved in road accidents involving electric vehicles must have.

The Chief of Fire Brigade Intervention says that if responders are going to act on a risk, they must have the appropriate PPE and makes a very important contribution by pointing out that the use of category III equipment (which protects against risks that can have very serious consequences such as death or irreversible damage) such as dielectric protective gloves or SCBA, must be accompanied by training in their proper use and maintenance. This brings us back to the need for standardised and unified training that covers all aspects.

## 5. CONCLUSIONS

Based on the analyses, we can confirm that, although information and guidelines are available, we have not found any formal training or unified protocols for action for emergency services intervening in road accidents involving electric vehicles in Spain. We have seen shortcomings in terms of the necessary training of emergency services during intervention in a road accident involving electric vehicles, and even the emergency response guides of vehicle manufacturers are lacking to minimise the risks involved.

---

<sup>15</sup> Dielectric gloves must comply with the UNE-EN 60903:2005 standard, which specifies the requirements for the manufacture, verification and correct use of electrically insulating gloves and mittens, with and without mechanical protection. Face shields certified according to UNE-EN 166-2002 (individual eye protection) are the only eye protectors valid for this area of the body, and they also include the requirement for protection against short-circuit electric arc.



We will make some recommendations along the lines of the research carried out by the key organisations and agencies referenced, and the opinions of practitioners and experts in the field who have been interviewed for this paper.

The first proposal is to organise a national summit, along the lines of those held in the US in 2010 and 2016 by the NFPA's Fire Protection Research Foundation, to address issues related to training and safety standards affecting electric vehicles and other non-combustion propulsion systems, as well as first and second responders.

Given the complex territorial organisation of the Spanish State, with three territorial and jurisdictional spheres, it will be necessary to determine which national and/or sectoral administrations, bodies, institutions, etc. should participate. The federal organisation of countries such as the USA and Germany, together with the fact that both have conducted research into the subject studied and have formal training and standardised protocols, could be used as a roadmap for an initiative, even at European level, to comprehensively address the current and future safety and environmental challenges brought about by the increasing deployment of new propulsion energy vehicles. Proposal supported by the interviewed officials from DGT, Fundación MAPFRE and the APTB association.

Other institutions, associations, institutes, foundations, university researchers and other fields related to new vehicle motorisation technologies and safety standards should form part of a multidisciplinary team and manufacturers' and dealers' associations, such as ANFAC and FACONAUTO, are essential in that the manufacturers are largely responsible for the necessary information contained in the guides and response sheets to minimise the risks of this vehicle segment.

In line with the American NFPA, a comprehensive training programme should be developed for the emergency services and a quick reference guide should be developed at the scene of a road accident or incident. It would therefore be advisable to add the guidelines of the German standard DGUV 200-06 and the French standard NFC 18-550 to the formal training of Royal Decree 614/2001.

Continuous education and training of health and emergency professionals is essential, and therefore permanent updating should be programmed as new propulsion technologies are developed, which should not be limited to exclusively academic training, but should include activities such as specialisation and refresher courses, conferences or forums for sharing experiences.

Adopting the German proposal to make up for the current impossibility of accessing the relevant battery parameter data, as it is encrypted and accessible only to manufacturers, promoting the development in new vehicle designs of a future Event Data Recorder (EDR) among manufacturers that acts as a black box, containing a minimum of required accident data. This data would be sent to a data centre and would be available immediately after the accident. (Wöhrle, Geisbauer, Nebl, Lott, & Schweiger, 2021, pág. 15)

Information and awareness-raising campaigns, using research results, would be a good practice to implement. Including the transmission of battery and propulsion system data to emergency teams and real-time access to vehicle registration and technical data in the action protocol would be another good practice.

## References

- AEDIVE and GANVAM. (8 February 2020). A booklet of safety recommendations on hybrid and electric vehicles for repair and maintenance workshops. Retrieved on 2 April 2023, from <https://aedive.es/adecuacion-talleres-movilidad-electrica-evitara-desaparicion-centros-posventa/>
- Madrid Security and Emergency Agency (ASEM). (October 2019). Joint Action Procedure for intervention in road accidents. (A. C. Madrid, Ed.) Retrieved 2023, from [www.comunidad.madrid](http://www.comunidad.madrid): <https://www.comunidad.madrid/hospital/summa112/profesionales/procedimiento-actuacion-conjunta-intervencion-siniestros-viales>
- APRAT and DGT. (2019). Basic Manual of Rescue in Traffic Accidents. (D. G. Traffic, Ed.) Madrid: Editorial Cuarto Centenario.
- Spanish Association for Standardisation and Certification (AENOR). (April 2002). Spanish standard UNE-EN 166. Individual eye protection. Specifications, 39. Madrid: AENOR.
- Spanish Association for Standardisation and Certification. (September 2005). Spanish standard UNE-EN 60903. Voltage work. Insulating gloves, 65. Madrid: AENOR.
- Bonilla Blas, D., Vélez Álvarez, J. A., García Sánchez, L., Basset Blesa, J. M., Ballester, P. S., Ortíz Linares, J. A., & Herrera de Pablo, P. (May 06, 2019). Joint Action Plan for Traffic Accidents. (ATGC-BCV-SES-CV, Ed.) Retrieved 2023, from [www.bombersdv.es](http://www.bombersdv.es): <https://www.bombersdv.es/protocols-dactuacio/>
- U21 Commission for the Prevention of Electrical Accidents. (6 June 2015). [fr.scribd.com](http://fr.scribd.com). Retrieved on 3 April 2023, from <https://es.scribd.com/document/541488510/PR-NF18-550-ES#>
- DGUV 200-006. (April 2012). Training for work on vehicles with high voltage system. Retrieved from [www.dguv.de](http://www.dguv.de): <https://aftermarket.zf.com/remotemedia/new-structure-2020/zf-aftermarket/pdf-s/training-high-voltage-vehicles-200-006-en.pdf>
- Euralarm. (2022). Guideline on Integrated fire protection solutions for lithium-ion batteries. Zug, Switzerland: Euralarm.
- EuroNCAP. (n.d.). [www.euroncap.com](http://www.euroncap.com). Accessed in February 2023, from <https://www.euroncap.com/es>
- Feng, X., Ouyang, M., Liu, X., Lu, L., Xia, Y., & He, X. (January 2018). Thermal runaway mechanism of lithium ion battery for electric vehicles. *Energy Storage Materials*. (H. M. Cheng, Ed.) *Energy Storage Materials*, 10, 246-267. doi:<https://doi.org/10.1016/j.ensm.2017.05.013>
- Franco, J. C. (31 August 2022). [forococheselectricos.com](http://forococheselectricos.com). Accessed on 1 April 2023, at <https://forococheselectricos.com/2022/08/segun-axa-coches-electricos-pueden-ser-mas-peligrosos.html>
- Grant, C. C. (2010). Annual Electric Vehicle Safety Standards Summit. Summary Report. Co-Hosted by SAE International & National Fire Protection Association (NFPA). Quincy, Massachusetts: Fire Protection Research Foundation. Retrieved from [www.nfpa.org](http://www.nfpa.org) and [www.sae.org](http://www.sae.org)

- Grant, C. C. (August 2016). Alternative Fuel Vehicle Safety Summit. Quincy, Massachusetts: Fire Protection Research Foundation. Retrieved from <https://www.nfpa.org/education-and-research/research/fire-protection-research-foundation/projects-and-reports/proceedings/alternative-fuel-vehicle-safety-summit>
- Vehicle Research Institute Centro Zaragoza. (2022). Safe handling of hybrid and electric vehicles. Retrieved from [www.centro-zaragoza.com](http://www.centro-zaragoza.com).
- Jimenez Onetti, R., Cobián Martínez, P. C., Barón Hidalgo, F., Quesada Hernández, Á. A., Marchal Carmona, J., Flores Ortega, F., . . . García del Águila, J. J. (2015). Operational Procedure for joint action in traffic accidents in Andalusia. (E. P. Sanitarias, Ed.) Retrieved 2023, from [www.epes.es](http://www.epes.es): <http://www.epes.es/?publicacion=procedimiento-actuacion-en-los-accidentes-de-trafico-en-andalucia>
- Klock, A. (June 2013). Emergency responder training for Advanced Electric Drive Vehicles. National Fire Protection Association. Quincy, Massachusetts: The Fire Protection Research Foundation. Retrieved from [www.nfpa.org/Foundation](http://www.nfpa.org/Foundation)
- Long Jr, R. T., Blum, A. F., Bress, T. J., & Cotts, B. R. (27 June 2013). Best Practices for Emergency Response to Incidents Involving Electric Vehicles Battery Hazards: A Report on Full-Scale Testing Results. Final Report. Quincy, Massachusetts: The Fire Protection Research Foundation. Retrieved from [https://www.energy.gov/sites/prod/files/2014/02/f8/final\\_report\\_nfpa.pdf](https://www.energy.gov/sites/prod/files/2014/02/f8/final_report_nfpa.pdf)
- Mateo Fernández, J. (August 2021). Risks in policing with hybrid and electric vehicles involved in road accidents. Retrieved 2023, from [spls.es](https://spls.es): <https://spls.es/wp-content/uploads/2021/08/RIESGOS-EN-LA-ACTUACION-DE-LOS-POLICIALES-CON-VEHICULOS-ELECTRICOS-UNO-DE-LOS-RIESGOS-DE-LOS-ACCIDENTES-DE-TRAFICO-EN-ANDALUCIA>
- McAllister, J., & McAllister, B. (September 2019). Fire and Emergency Service Personnel Knowledge and Skills Proficiency. National Fire Protection Association. Quincy, Massachusetts: Fire Protection Research Foundation. Retrieved from [web.nfpa.org/foundation](http://web.nfpa.org/foundation)
- National Transportation Safety Board (NTSB). (23 June 2020). Safety Risk to Emergency Responders from Lithium-Ion Battery Fires in Electric Vehicles. NTSB/SR-20/01. Retrieved on 1 March 2023, from [www.usfa.fema.gov](http://www.usfa.fema.gov): <https://www.nts.gov/safety/safety-studies/Documents/SR2001.pdf>
- National Observatory for Road Safety. (2022). Road Safety Strategy 2020-2030. Madrid: Directorate General of Traffic. Retrieved from [www.dgt.es](http://www.dgt.es)
- World Health Organisation. (19-20 February 2020). Third Global Ministerial Conference on Road Safety. Retrieved from [www.roadsafetysweden.com](http://www.roadsafetysweden.com)/[about-the-conference/stockolm-declaration/](http://www.roadsafetysweden.com/about-the-conference/stockolm-declaration/)
- Rask, E., Pavlich, C., Stuntenberg, K., Duoba, M., & Keller, G. (2020). Stranded Energy Assessment Techniques and Tools. Washington DC: National Highway Traffic Safety Administration (NHTSA). Retrieved from <https://rosap.nhtsa.gov/view/docId/43941>
- SAE International. (29 July 2019). SAE J2990 Hybrid and EV First and Second Responder Recommended Practice Overview. Retrieved on 19 March 2023, from [https://historia.nationalgeographic.com.es/a/muerte-tutankamon-probablemente-atropellado\\_7755](https://historia.nationalgeographic.com.es/a/muerte-tutankamon-probablemente-atropellado_7755)

- Stephens, D., Shawcross, P., Stout, G., Sullivan, E., Saunders, J., Risser, S., & Sayre, J. (2017). Lithium-ion Battery Safety Issues for Electric and Plug-in Hybrid Vehicles. DOT HS 812 418. Washington, DC: National Highway Traffic Safety Administration (NHTSA). Retrieved from [https://www.nhtsa.gov/sites/nhtsa.gov/files/documents/12848-lithiumionsafetyhybrids\\_101217-v3-tag.pdf](https://www.nhtsa.gov/sites/nhtsa.gov/files/documents/12848-lithiumionsafetyhybrids_101217-v3-tag.pdf)
- Tacheová, E. (December 2022). lithium-ion batteries Why and when do they pose a chemical contact risk to humans? Zaragoza Centre Technical Magazine (94), 46 - 48. Retrieved from [www.centro-zaragoza.com](http://www.centro-zaragoza.com)
- TÜV SÜD. (April 2023). [www.tudsud.com/es-es/formacion-vehiculo-electrico](http://www.tudsud.com/es-es/formacion-vehiculo-electrico). Retrieved April 2023
- U.S. Fire Administration (USFA). (23 June 2022). Emergency Response Guides for Electric Vehicles and Lithium ion Batteries. Retrieved on 19 March 2023, from <https://www.usfa.fema.gov/blog/ig-062322.html>
- Vervecken, L. (17 April 2021). Thermal Runaway: Lithium-ion Battery Safety. (Diabatix) Retrieved 2023, from [www.diabatix.com](http://www.diabatix.com): <https://www.diabatix.com/blog/prevent-thermal-runaway>
- Wöhr, K., Geisbauer, C., Nebl, C., Lott, s., & Schweiger, H. G. (16 February 2021). Crashed Electric Vehicle Handling and Recommendations-State of the Art in Germany. *energies*, 21. Retrieved from <https://www.mdpi.com/q996-1073/14/4/1040>



**Pedro José Molina García**  
Malaga Local Police Officer  
Diploma on Labor Relations and Bachelor of  
Labor Sciences from the Malaga University.  
Postgraduate on Road Safety from the CUGC  
attached to the Carlos III University of Madrid  
V Master's Degree on Road Safety and Traffic

## **VMP's MICROMOBILITY ON URBAN ROADS**



## PMV MICROMOBILITY ON URBAN ROADS

**Summary:** 1.- INTRODUCTION. 1.1. Objectives 1.2. Methodology 2. NATIONAL AND LOCAL REGULATORY FRAMEWORK. 2.1. National legislation on PMV 2.2. Municipal regulations in Malaga 3. MALAGA LOCAL POLICE'S SURVEILLANCE AND CONTROL OF COMPLIANCE WITH TRAFFIC LEGISLATION BY THE DRIVERS OF THESE VEHICLES 4. ROAD INFRASTRUCTURE FOR PMV. 4.1. In the city of Malaga 4.2. Comparative study with other Spanish cities. 5. ROAD ACCIDENTS INVOLVING PMVs. 5.1. Analysis of PMV road accident rates in Malaga. 5.2. Comparative analysis with national statistics, and reference to the Road Safety Strategy 2021–2030. 5.3. Comparative analysis with international statistics for the city of Lisbon. 6. THE OPINION OF EXPERTS IN THE FIELD. 7. ANALYSIS OF THE RESULTS. 8. CONCLUSIONS AND PROPOSALS FOR IMPROVEMENT. 8.1. Conclusions. 8.2. Proposals for improvement.

**Resumen:** La Micromovilidad urbana como realidad social y vial, se puede estimar que tiene en torno a un lustro de vida; aunque sin abandonar la esencia del término, que continúa siendo aplicable a toda modalidad o medio de transporte personal que se lleva a cabo a través de vehículos muy ligeros. En este tiempo, la tecnología ha avanzado a una velocidad de vértigo, ofreciendo múltiples ventajas, como sostenibilidad, comodidad, independencia, ahorro, etc., respecto a otras formas de desplazamiento tradicionales. Sin embargo, los indudables beneficios que ello supone no están exentos de importantes problemas y dificultades, siendo especialmente destacables los relativos a la convivencia vial diaria entre todos los usuarios de las vías públicas, manifestados de manera preocupante en la presencia de estos vehículos en la siniestralidad vial.

Dentro de esa evolución y ciñéndonos a la situación actual, hay que remarcar por encima de todos al vehículo de movilidad personal (VMP), y más concretamente al patinete eléctrico, puesto que es el que ha conseguido mayor aceptación de entre todos los aparatos impulsados por motor eléctrico, debiendo tanto el Legislador como las Administraciones y la sociedad en general, enfrentarse abiertamente al ineludible desafío de buscar y encontrar fórmulas legislativas que garanticen la convivencia pacífica y segura entre todos los usuarios de la vía.

**Abstract:** Urban Micromobility as a social and road reality can be estimated to be around five years old; although without abandoning the essence of the term, which continues to be applicable to any modality or means of personal transport that is carried out through very light vehicles, in this time technology has advanced at breakneck speed, offering multiple advantages, such as sustainability, comfort, independence, savings, etc., with respect to the traditional forms of displacement. However, the undoubted benefits that this implies are not exempt from important problems and difficulties, being especially noteworthy those related to daily road life among all users of public roads, manifested in a worrying way in the presence of these vehicles in the accident rate road.

Within this evolution and sticking to the current situation, it is necessary to emphasize above all the Light Electric Vehicles (LEV), and more specifically the electric scooter, since it is the one that has achieved the greatest acceptance of all the devices powered by electric motor, having both the Legislator and the Administrations and society in general,



openly face the unavoidable challenge of seeking and finding legislative formulas that guarantee peaceful and safe coexistence among all road users.

**Palabras clave:** Micromovilidad, seguridad vial, vehículo movilidad personal, patinete eléctrico, siniestro vial.

**Key words:** Micromobility, road safety, personal mobility vehicle, electric scooter, road accident.

## 1. INTRODUCTION

Throughout human history, the intelligence of humans has enabled them to facilitate the movement of people and cargo on land. The use of domesticated animals, sledges and other forms of traction evolved until the invention of the wheel in ancient Mesopotamia, and this has been in use for more than 7,000 years.

However, it was not until 1885, when Carl Benz invented the first three-wheeled automobile, that the use of the wheel developed significantly, although Ferdinand Verbiest's steam-powered wheeled vehicle had been around since the 17th century. (Puig J., 1999, pág. 1)

But the considerable physical dimensions of these new vehicles, together with their mechanical complexity, led to the emergence of a personal mobility vehicle in 1693. It was devised by Professor Ozana of the Sorbonne University in Paris, was transformed by the Frenchman De Sivrac and christened *Célérierifère* in 1790. In 1817, the German Baron Karl von Drais rescued it from oblivion, resulting in the emergence of his velocipede or “running machine” (*Laufmaschine* in German), a device which became the precursor of the bicycle after some modifications and was christened “steel horse” (*Eisen Pferd*, in German). (Malavé, S.J., 2018, págs. 4-6)

Since then, a huge succession of inventions has been trying to facilitate personal mobility. There was a notable milestone in 1885 when the German engineer, builder and industrialist Gottlieb Daimler used a bicycle with a single-cylinder engine of his own invention for the first time, thus creating the first motorbike. (AMV, 2018) This invention brought about a real-world revolution in personal mobility.

It is obvious that communication routes have evolved as the means of transport have evolved. We remember how the Romans built their first roads around 312 BC and the very important via Flaminia, a Roman road that led from Rome to Ariminum (today's Italian city of Rimini). It should also be remembered that it was the Romans who were the first to develop road signs on their roads with the millarios, which were stone columns measuring just over a metre and indicating the direction to a place and the distance to Rome, hence the saying: "All roads lead to Rome." (Recuento, P., 2015, pág. 1)

We have also observed that the various human inventions in terms of personal mobility from ancient times until now have been accompanied by the necessary adaptation of legislation that would allow these inventions to be used in a way that would not pose a danger to pedestrians or drivers themselves. So, we consider the event of the pharaoh Tutankhamun dying after allegedly being run over by a chariot to be what caused legislative repercussions on the circulation of vehicles in ancient Egypt. (Sala, A., 2022, pág. 1)

These legislative changes proliferated with the emergence of motor vehicles in the 19th century, as legislators were required to adapt the existing rules to regulate the use of these new devices by their users, the interaction between them and people who used animal traction – which was the predominant form of transport at that time – and these two forms of transport with pedestrians. These facts are confirmed by the curious English Locomotive Act, which stipulated that vehicles not pulled by horses (at that time vehicles without horses used boilers) should not exceed 3 km/h in cities and 6 km/h on rural roads

(Mircea A., 2004, pág. 11). There is further evidence with the creation of the first "modern" traffic signs, which were implemented by the Italian Automobile Club and accepted and extended at European level back in 1909. (Mellado, L., 2022, pág. 8)

In Spain, when Antonio Cánovas del Castillo was President of the Council of Ministers, the Royal Order of 1897 was approved, which was the first regulation on the circulation of motor vehicles in Spain. It then took more than 20 years from 1926 to 1949 to unify all the traffic signs throughout Europe, with the United States joining in 1960.

## 1.1 OBJECTIVES

After this brief introduction about the impact of incorporating a new means of transport, we now move on to an analysis of micromobility in personal mobility vehicles (PMVs) (Parlamento Español, 2020, pág. 98642). The search for economy, greater respect for the environment, improved mobility, manoeuvrability, agility, accessibility, etc., have resulted in the emergence of inventions such as electric scooters (La Vanguardia, B., 2022, pág. 1), electric unicycles (Landaverde, LF et al., 2013, pág. 33), segways (Boniface K, McKay MP, Lucas R, Shaffer A, Sikka N, 2010, págs. 370-374), (Sawatzky B. et al., 2007, págs. 1423-1428), (Boutilier G., et al., 2012, págs. 595-598) and hoverboards (Gómez-Cabrero S., 2016, pág. 24). However, we will focus our attention on the so-called electric scooters as they are currently the predominant ones, and more specifically, those conceptualised in Section 1 "Definition of Personal Mobility Vehicle (PMV)" of the Directorate General of Traffic (DGT) Resolution of 12 January 2022, which approves the manual of characteristics of PMVs (Parlamento Español, 2022, pág. 6884):

A single-seated vehicle with one or more wheels, powered exclusively by electric motors that can give the vehicle a maximum design speed of between 6 and 25 km/h. They can only be equipped with a seat or saddle if they are equipped with a self-balancing system.

Similarly, Section 2 of this Resolution sets out the technical characteristics that PMVs for personal transport must have, as shown in the following tables.

<b>VMP de transporte personal</b>	
Velocidad máxima	Entre 6 y 25 km/h
Potencia nominal <sup>(3)</sup> por vehículo.	Vehículos sin auto-equilibrado: ≤ 1.000 W      Vehículos con auto-equilibrado <sup>(4)</sup> : ≤ 2.500 W
Masa en orden de marcha <sup>(5)</sup> .	< 50 kg
Longitud máxima.	2.000 mm

<sup>(3)</sup> La potencia nominal deberá ser declarada por el fabricante del motor y medida según el apartado 4.2.14 de la norma EN 15194:2018, o alternativamente en el Reglamento n.º 85 de la Comisión Económica para Europa de las Naciones Unidas (UNECE) - Disposiciones uniformes relativas a la homologación de motores de combustión interna o de grupos motopropulsores eléctricos para la propulsión de vehículos de motor de las categorías M y N en lo que respecta a la medición de la potencia neta y la potencia máxima durante 30 minutos de los grupos motopropulsores eléctricos (DO L 323 de 7.11.2014, pág. 52).

<sup>(4)</sup> Al menos el 60% de esta potencia se debe dedicar al sistema de autoequilibrado.

<sup>(5)</sup> Masa en orden de marcha: masa del vehículo tal y como se define en el artículo 5 del Reglamento (UE) n.º 168/2013.

Tabla 1. Características de VMP de transporte personal

Altura máxima.	1.400 mm
Anchura máxima.	750 mm

Table 1. Characteristics of PMVs for personal transport.

Source: [https://www.boe.es/diario\\_boe/txt.php?id=BOE-A-2022-98](https://www.boe.es/diario_boe/txt.php?id=BOE-A-2022-98).

The electric scooter is a PMV with undoubted advantages in terms of economy, environmental friendliness and manoeuvring agility. In addition to this, the fact that you do not need a license or insurance to use it in our cities makes it enormously attractive. However, the lack of training, if not the recklessness of many of its users, together with the absence of homogeneous regulations at state level, have turned its use into a considerable road safety and coexistence problem that must be solved as soon as possible. In 2018, according to data from the Road Safety Prosecutor's Office, there were 273 accidents involving personal mobility vehicles in which five fatalities were recorded (López J., 2019, pág. 2), and these figures are unfortunately on the rise.

In addition to this and bearing in mind that we are currently still in a state of flux regarding the need for insurance, it is undeniable that the drivers of this type of vehicle are liable for the damage they may cause, and therefore the non-contractual civil liability derived from Art. 1902 or, if applicable, 1903 of the Spanish Civil Code. Furthermore, in order for it to be applied, it must be proven that the road accident causing the damage was due to the fault or negligence of the driver. This is the same for the homicides and/or injuries that they may cause through recklessness, as set out in Art. 142 and 152 of the Spanish Criminal Code respectively.

In relation to this liability, a recent court ruling is cited below:

- Judgment of the Provincial Court of Asturias, no. 155/2023, of 5 April, in which *"by means of this judgment, the liability of a PMV driver who ran over a pedestrian causing the pedestrian a series of injuries while the pedestrian was walking on the pavement was upheld. Considering the existence of non-contractual liability under Art. 1902 of the Civil Code, it is proven that the driver of PMV was negligent in not respecting the pedestrian's right to use the pavement."*

In observing the facts referred to here, the legislator has been generating instructions and laws that try to regulate the use of these PMVs since 2016. These include Instruction 16/V-124 of the Directorate General of Traffic (DGT), of 3 November 2016 (Ministerio del Interior, DGT, 2016, pág. 2); Instruction 19/S-149 TV-108 of the DGT, of 3 December 2019 (Ministerio del Interior, DGT, 2019, págs. 3-4); Royal Decree 970/2020, of 10 November (Parlamento Español, 2020, págs. 98640-98641-98642); Law 18/2021, of 20 December (Parlamento Español, 2021, págs. 156150-156152-156153), and the Resolution of 12 January 2022, of the DGT, approving the PMV Characteristics Manual. (Parlamento Español, 2022, pág. 6884)

However, the aforementioned laws show a lack of rigour in the area of road safety by delegating to local councils, through their local ordinances, the regulatory development of an issue that is so key for the road safety of citizens and which has a powerful impact on the accident rate. This turns the national panorama into real legislative gibberish regarding PMVs. In this regard, we believe that a single minimum legal age for drivers should be established throughout Spain, protective helmets should be compulsory, and there must be an obligation to take out civil liability insurance for these devices. These matters were already covered by the Director of the DGT, Pere Navarro, and published in La Vanguardia in 2021: *"The government plans to regulate other aspects, such as the minimum age for driving a PMV, the obligation to wear a helmet and reflective elements and the need to have traffic insurance"*. (Moreno, S., 2021, pág. 3).

## 1.2 METHODOLOGY

Given the aforementioned circumstances, we will focus our attention on the current and incipient problem posed by these vehicles in towns, and more specifically in the city of Malaga. We will make certain comparisons with the whole of Spain and with the city of Lisbon due to its demographic similarity with Malaga. For this purpose, we proceeded to analyse several parameters, such as the aforementioned national and local regulatory framework, the Malaga Local Police's surveillance and checks on compliance with traffic legislation by drivers of these vehicles, the road infrastructure of the city, and the road accident rate with PMVs occurring between the calendar years 2019 and 2022. We did this by obtaining documentary legal data, own sources requested from the City Council of Malaga and its Local Police Force, the DGT and the Lisbon Public Security Police (PSP), as well as exploratory interviews with experts in the field of road safety from various organisational areas.

## 2. NATIONAL AND LOCAL REGULATORY FRAMEWORK

### 2.1 NATIONAL PMV LEGISLATION

Urban mobility, together with technological progress, is evolving at an accelerated pace and this has resulted in the enormous impact of PMVs in Spain in recent years. They surprised the public authorities when they burst into society without there being any specific legal regulation for these types of vehicles.

Consequently, different road users began to coexist in the same road space, giving rise to problems of daily coexistence due to the lack of a legal framework regulating issues such as where they should travel, whether they could carry passengers, whether they needed administrative authorisation to drive, whether helmets should be worn, whether they should have lights, civil liability insurance, etc.

As a result of this chaotic situation, there was an increase in accidents and less road safety for all road users, as shown in Table 2, which, based on official DGT data, shows the accident figures for PMVs in 2019 and 2020, the two years prior to their regulation.

<b>Years</b>	<b>Accidents with victims</b>	<b>Deaths</b>	<b>Hospitalisations</b>	<b>Non-hospitalised injuries</b>
<b>2019</b>	908	5	137	798
<b>2020</b>	1305	8	97	1097

*Table 2. Data on road accidents involving PMVs nationally in 2019 and 2020.*

*Source: created by the authors based on data from the DGT's Key Road Accident Figures*

And this all occurred at a time when road accidents have become one of the key concerns of the 21st century for different countries. This is because their serious consequences and the need to adopt various public policies that contribute to reducing the number of serious injuries and deaths caused by road accidents have become apparent. The authorities are aware enough of this that it has led, within the framework of European policies, to the United Nations General Assembly resolution 74/299 declaring a Decade of Action for Road Safety 2021-2030 "with the aim of reducing road traffic deaths and injuries by 50% during that period." (OMS, 2021, pág. 6)



Finally, and in light of all of the above, the legislator drew up and developed the national regulatory framework regulating PMVs, which is set out in the chronological order of its entry into force in the Introduction, section 1.1 Objectives, of this article.

A summary of the above-mentioned regulatory changes regarding the circulation of electric scooters is shown visually in the following image:



Image 1. Descriptive summary of the rules of the road for electric scooters prepared by the DGT. Source: <https://www.dgt.es/muevete-con-seguridad/viaja-seguro/en-patinete/>

Directly related to the image above, and taking into account that all users of these vehicles must comply with minimum traffic conditions, the penalties that they entail under current traffic legislation are as follows:

- Prohibiting PMVs from driving on pavements, pedestrian areas, motorways, dual carriageways, interurban roads or tunnels in urban areas. The roads authorised for driving will be indicated in a municipal ordinance. If there is no such road, driving is allowed on any urban road. Penalty of 200 euros (serious infringement).
- The speed of these vehicles shall be between 6 and 25 km/h. If they exceed this speed, they are not considered a PMV, so they will not have administrative authorisation to circulate, with a fine of 500 euros (very serious offence) and immobilisation of the vehicle.
- The prohibition of using a mobile phone, headsets or headphones connected to sound receivers or players while riding a scooter, punishable by a fine of 200 euros (serious offence).
- These are single-seater vehicles, prohibiting the circulation of two or more people in the same vehicle, which is a minor offence with a fine of up to 100 euros.
- Driving without lighting, reflective clothing or reflective elements is considered negligent driving, since the user does not take the necessary diligence to be seen by other drivers on the road and puts themselves in danger. Penalty of 200 euros (serious infringement).

- Driving under the influence of alcohol and/or drugs is prohibited. In these cases, a positive result for alcohol under 0.50 mg/l would carry a fine of 500 euros. If the breath test is higher than 0.50 mg/l, the fine would be 1000 euros, while a positive result for drugs would carry a fine of 1000 euros, and the vehicle would be immobilised in all cases.

By way of comparison with European legislation in this respect, it is worth looking at the "European Bicycle and PMV Review Survey" carried out by the DGT Road Safety Observatory in 2021, in which questionnaires were sent to the 27 countries of the European Union. 17 of these countries responded, and the general conclusions of the survey were: "*For all these reasons, voluntary training and a minimum age for riding a bicycle or electric scooter are the most widespread initiatives in the EU.*" (DGT, Observatorio de Seguridad Vial, 2022, pág. 60)

## 2.2 MALAGA MUNICIPAL REGULATIONS

Once the national legislative framework regulating PMVs came into force, Malaga City Council published the Mobility Ordinance of the City of Malaga in the BOJA on Tuesday 19 January 2021, which came into force the following day. This ordinance aims to develop this legislation and adapt to the new times of urban mobility. This regulation devotes Heading IV entirely to "*Personal Mobility Vehicles*", specifically Articles 36 to 45. (Ayuntamiento de Málaga, 2022, págs. 78-83)

In summary, after analysing and detailing the national legislation that currently regulates the circulation of electric scooters, it can be indicated that each city council can regulate the circulation of these vehicles in a specific way by means of regulations regarding the obligation to ride with a protective helmet, the minimum age to drive them and the prohibitions related to stopping and parking these vehicles.

A very important issue to take into consideration with the circulation of these vehicles on urban roads is that the pavement is indisputably for pedestrians and the road is for all motor vehicles, so the PMVs are stuck in the middle. As they are not considered one or the other, there is a clear imbalance, disadvantage and defencelessness. That is, in the event of a road accident due to an electric scooter circulating on the pavement, the greatest risk of collision and possible injuries will always be for the pedestrian, while in the case of a road accident involving an electric scooter travelling on the road, the most damaging result will be for the driver of the scooter, which causes a real problem.

This was all stated by the Director General of Traffic, Pere Navarro Olivella, at the opening of the Ciudades a Pie Forum in Madrid on 5 March 2019:

The pavement is for pedestrians. Pedestrians are the weakest link in the mobility chain and the proof of this is that more than 300 people are killed by being hit by cars every year in Spain, and these figures soar among older people, who account for more than 70% of those hit by cars. (DGT, 2019, pág. 6)



### 3. MALAGA LOCAL POLICE'S SURVEILLANCE AND CONTROL OF COMPLIANCE WITH TRAFFIC LEGISLATION BY THE DRIVERS OF THESE VEHICLES

Malaga is the sixth most populated city in Spain, with 579,076 inhabitants according to data published on 1 January 2022. (Instituto Nacional de Estadística, 2022, pág. 1)

One reason for this is the weather: "*Malaga is the Spanish province with the most motorbikes per inhabitant, registering 10,958 two-wheeled vehicles per 100,000 citizens, ahead of Gerona and Granada*"(Asociación Nacional de Empresas del Sector de Dos Ruedas, ANESDOR, 2020, págs. 21-22). This shows the city's drivers' predilection for this type of mobility.

There is currently no municipal census of private electric scooters in Malaga, contrary to what is recommended in the aforementioned legislation. Therefore, it is not possible to quantify the exact number of these vehicles that circulate daily on the various roads in Malaga, with experts in the field consulted estimating that the fleet of these vehicles in Malaga is currently around 3,700 electric scooters, of which only 1,344 are registered, and this is because they are owned by companies operating services.

As of today, the Malaga Local Police Force has a total of 895 officers according to data provided by the Chief Intendant 2nd Chief of the Malaga Local Police, José María Martínez Vázquez.

Bearing in mind that "*according to security theoreticians the optimum ratio in this situation should be around two police officers per 1,000 inhabitants, provided that the functions carried out are those legally determined,*" (Cámara de Cuentas de Andalucía, 2000, pág. 2) the appropriate number of police officers in the Malaga Local Police should be 1,158, so it is clear that there is a deficit of 263 police officers, which is 23% below the recommended number.

Once the variables that may influence this chapter are known, a summary of offences committed by PMV drivers and reported by the Malaga Local Police in 2021 and 2022, which was requested from the Penalties Department of the Malaga City Council's Autonomous Tax Management Body, is shown below.

Descripción	Suma	2021	2022
Acceder sin autorización con un VMP a una vía cuyo paso está restringido a determinados usuarios.	1	1	0
Rebasar un semáforo en fase roja con un VMP.	347	148	199
Estacionar un VMP sobre la acera o zona peatonal, de modo que se obstaculice gravemente el tránsito de los peatones.	16	16	0
Explotar comercialmente un VMP en alquiler, o para rutas turísticas, careciendo de seguro de responsabilidad civil	1	0	1
Circular con un VMP realizando maniobras bruscas.	3	1	2
Circular con un VMP de forma negligente.	39	21	18
Circular con un VMP agarrándose a vehículos en marcha o siendo remolcados por éstos.	2	1	1
Circular con un VMP utilizando auriculares receptores o reproductores de sonido.	134	57	77
Circular con un VMP utilizando dispositivo de telefonía móvil o cualquier otro dispositivo de análoga naturaleza.	148	69	79
Circular con un VMP cruzando pasos para peatones.	37	14	23
Circular con un VMP por zona afectadas por cualquier evento deportivo, cultural o religioso.	1	0	1
Circular con un VMP por las acera, paseo, y demás zonas destinadas al uso de peatones.	553	245	308
Circular con un VMP por las zonas 20, calles residenciales y vías de plataforma única sin respetar en todo momento la preferencia peatonal.	7	5	2
Circular con un VMP por zonas restringidas al tráfico sin respetar la prioridad peatonal.	8	5	3
Circular con un VMP por vías ciclistas sin respetar la prioridad de paso de los peatones o vehículos en los cruces señalizados y/o regulados por semáforo.	3	1	2
Estacionar un VMP fuera de las reservas señalizadas para tal fin.	355	179	176
Estacionar un VMP sobre la acera o zona peatonal.	17	17	0
Estacionar un VMP en lugar distinto de los estacionamientos señalizados para poder hacerlo.	0	0	0
Circular por la acera con un VMP perturbando la normal circulación de los peatones.	2	2	0
Conducir un VMP portando a dos o más personas.	17	15	2
Conducir un VMP siendo menor de 16 años.	196	88	108
Circular con animales u objetos que dificulten la conducción segura de un VMP.	2	2	0
Circular con un VMP que carezca de sistema de frenada, timbre, luces delanteras y traseras, o elementos reflectantes y/o catadiópticos.	8	3	5
Circular con un VMP sin llevar las luces encendidas a cualquier hora del día.	41	22	19
Circular con un VMP sin llevar casco protector por la calzada de las vías que no sean ZONAS 30, ZONAS 20, o carriles limitados a 30 km/h.	267	144	123
Circular con un VMP sin usar chaleco reflectante o elementos visibles a 150 m. Circulando por la calzada de las vías que no sean ZONAS30, ZONAS 20.	83	56	27
Circular con un VMP sin respetar una distancia mínima de separación de un metro con los peatones.	10	4	6
Circular con un VMP cuando se produzcan una aglomeración de personas.	13	3	10
Circular con un VMP en ZONAS30 y max.30 sin banderín de seguridad cuando el conjunto VMP-conductor no alcance 1,40cm de altura	1	1	0
Adelantar sin la precaución requerida con un VMP cuando circule por un carril bici.	4	2	2
Circular con un VMP por un túnel urbano	1	0	1
Circular con un VMP con una tasa de alcohol superior a la permitida.	5	3	2
Circular con un VMP habiendo consumido estupefacientes, psicotrópicos, estimulantes u otras sustancias análogas.	1	0	1
Circular con un VMP de forma temeraria.	19	11	8
Conducir un VMP de modo temerario.	1	1	0
Circular con un VMP en sentido contrario al estipulado	152	71	81
	<b>TOTAL</b>	<b>2.495</b>	<b>1208</b>
		<b>1287</b>	

Table 3. Statistics on PMV offences in Malaga in 2021 and 2022.

Source: statistics requested from the Autonomous Tax Management Body of Malaga City Council (GESTRISAM).

As can be seen in Table 3, the total number of reported infringements is similar in the two years under study, at 1208 in 2021 and 1287 in 2022. Calculating an average number of offences reported daily by the Malaga Local Police, the result would be 3.31 daily reports issued during 2021 and 3.53 during 2022.

A fact to be taken into account is the type of offence most reported in the two years mentioned above, which is "circulating with a PMV on pavements, walkways and other areas intended for pedestrian use." This is defined in the aforementioned Mobility Ordinance in Article 40.A1 and incurs a fine of 200 euros (Ayuntamiento de Málaga, 2022, pág. 80). There were a total of 245 complaints in 2021 and 308 complaints in 2022, around 20% and 24% of the total respectively. This statistic is directly related to the phrase most often repeated by drivers of these vehicles: "I prefer to risk being reported by the local police for riding on the pavements than risk my life by riding on the road with other vehicles." This phrase reflects the difficult balance of coexistence between road users. The author foresaw a problem with this in the short or medium term due to the reluctance of electric scooter riders to ride on the road because of how unsafe it felt.

In addition to the initial information campaign launched when the above-mentioned national and local legislation came into force, the Directorate General of Traffic carried out one of these campaigns in the period from 25/10/2021 to 07/11/2021 as part of its planning of road safety prevention campaigns. The slogan of this campaign in several Spanish cities was "No pasa": *"The DGT starts a campaign in Malaga to monitor bicycles and scooters on the pavements."* (Ignacio, L., 2021, pág. 1)

With regard to general obedience and/or compliance with traffic regulations by electric scooter riders, there was a consultation of the survey presented by the Línea Directa Foundation in collaboration with the Spanish Foundation for Road Safety (FESVIAL), dated 27 April 2022, which surveyed 1,700 people nationwide. Only 14% of those surveyed believe that they habitually comply with traffic regulations, which means that electric scooter users are the drivers with the worst image in traffic. The survey showed that *"50% of PMV users recognise that they ride without a helmet, 73% sometimes ride on the pavement and 45% have at some point exceeded speed limits established for these vehicles (25 Km/h)."* (Fundación Línea Directa, 2022, pág. 2)

#### 4. ROAD INFRASTRUCTURE FOR PMVs

##### 4.1 IN THE CITY OF MALAGA

Malaga has a surface area of 394.98 km<sup>2</sup> and a perimeter of 145,428.59 m, according to data from the Andalusian Institute of Statistics and Cartography. (Junta de Andalucía, 2022, pág. 1) It has approximately 1,200 km of road or carriageway for vehicle traffic and is divided into 11 districts (territorial management divisions), with their respective neighbourhoods and industrial estates.

The information on bicycles, and therefore PMVs, on the municipal website (Ayuntamiento de Málaga, 2020, págs. 3-4-5) states: *"Malaga currently has 44,025 metres of cycle paths."*

Several municipal sources and experts were consulted on the subject, including the current Councillor for Mobility of Malaga City Council, Trinidad Hernández Méndez, who points out that personal mobility vehicles are, as their name indicates, vehicles, so they must circulate on the road. However, to do so with optimal road safety conditions, they need to have segregated road infrastructure that guarantees the greatest possible protection for all traffic users.

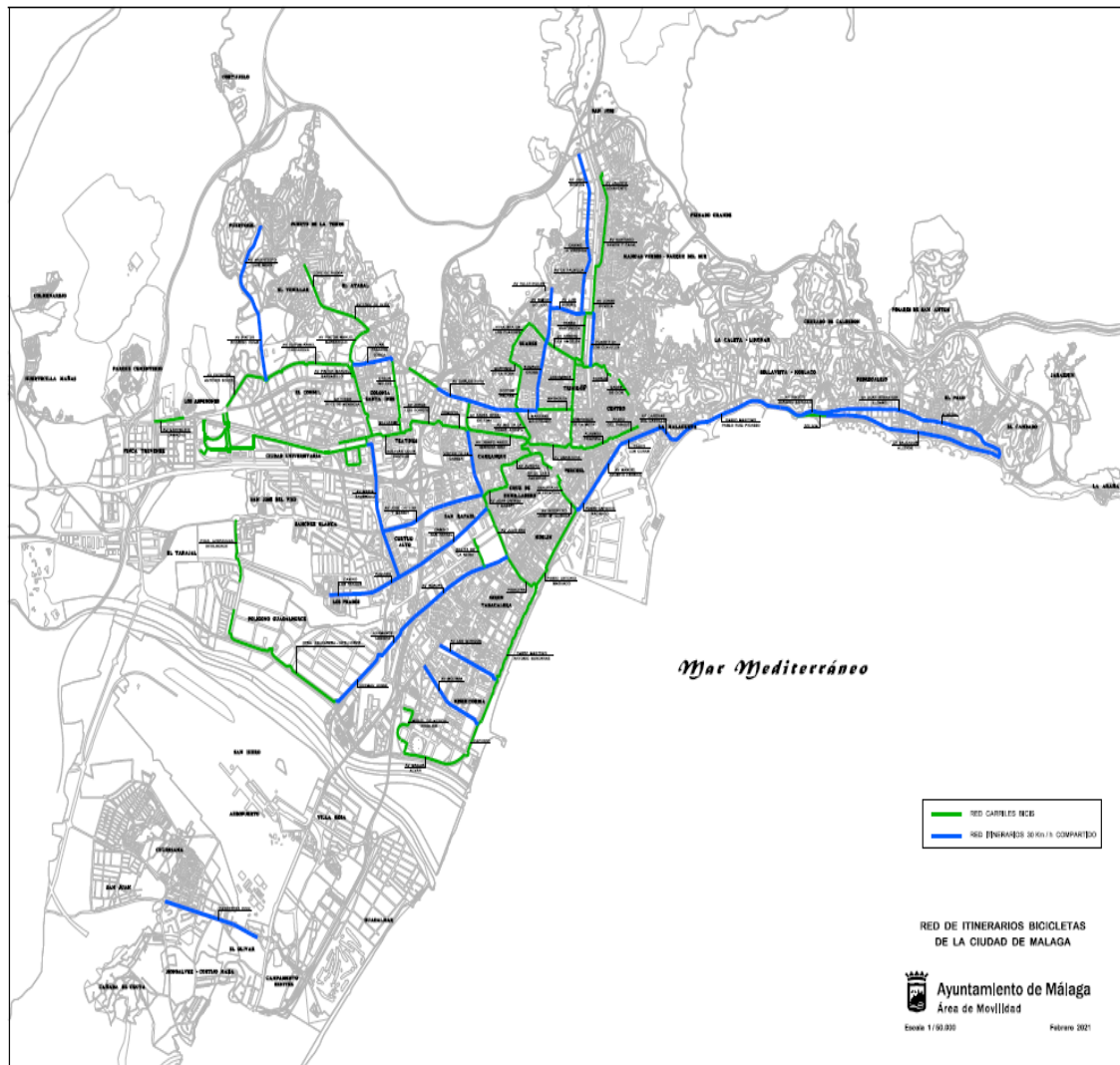
The Mobility Department of Malaga City Council has been working along these lines for some time now, and the planning of road needs in terms of infrastructure for cyclists and PMVs is set out in the "Malaga Bicycle Master Plan". This municipal plan expects to have 142 km of bike/PMV lanes by the end of its implementation, at an estimated cost of around 43 million euros. (Sanchez, S., 2022, pág. 1)

Malaga currently has the following road infrastructure for PMV traffic:

1. 45 km of segregated infrastructure for the exclusive use of bicycles and PMVs, with eight projects in the process of implementation and completion. This will increase this type of road to 60 km, as indicated on the municipal website.

2. 70 km of roads on which there is priority for PMVs and bicycles. These are two-lane roads in each direction, and it is the right lane that has this regulation, with a limit of 30 km/h when riding on this type of road, also known as bike lanes.

Image 2 below shows a map of Malaga at a scale of 1/50,000, published in February 2021 on the website of the Mobility Department of Malaga City Council. It shows the network of cycle routes in February 2021, in which the green line identifies the network of exclusive bike/PMV lanes, and the blue line indicates the network of shared 30 km/h routes, as explained in the previous paragraph.



GAP15013020221

Image 2. Map of the network of bike/PMV lanes in Malaga, February 2021.

Source: <https://movilidad.malaga.eu/opencms/export/sites/movilidad/.content/galerias/Documentos-del-site/Red-de-itinerarios-de-bicicletas.pdf>

By looking at image 2 while also taking into consideration the opinion of users and experts in the field and all the variables and/or circumstances relating to demography, territorial extension and division, vehicle fleet, urban importance, sustainability, social and road demand detailed and analysed, it is clear that the current 45 km of segregated infrastructure for the exclusive use of bicycles and PMVs (soon to be 60 km) is insufficient to properly meet the needs of drivers of these vehicles and other road users.

Consequently, it is also insufficient to guarantee urban road safety with the main objective of reducing the accident rate. PMV users consulted for this purpose also agreed.

Similarly, on the basis of the above, it can be determined that the network of shared 30 km/h routes in Malaga is also insufficient and disjointed, with approximately 6% of the total kilometres of carriageway used for vehicle traffic. Therefore, if they are not allowed on pavements and other pedestrian areas, and there are not enough dedicated segregated bike lanes, more and better quality 30 km/h cycle lanes for bicycle and PMV users are essential.

This option of bike lanes or shared lanes has many detractors for different reasons. These detractors cite as an example what was published on the website of the El Confidencial newspaper on 19 November 2021 (Pascual, A., 2021, pág. 12):

In 2016, a detailed study published by the University of Colorado compared bike lanes with cycle paths, which are protected and run separately from traffic, and concluded that cycle paths were twice as effective in encouraging cycling because they were perceived as safer. In addition, the researchers noted that, compared to normal streets, accidents involving cyclists decreased by 42% in areas with cycle paths, compared to 20% in bike lanes.

In relation to the above, mention is made of a news item published in the *Diario Sur de Málaga*, which stated that *"Malaga has 0.78 km of cycling lanes per ten thousand inhabitants, three times less than Seville or Palma de Mallorca."* (Jiménez, F., 2022, pág. 1)

#### 4.2 COMPARATIVE STUDY WITH OTHER SPANISH CITIES

In order to understand the state of road infrastructure and the use of public space by other local administrations working on urban traffic management for PMVs, the following is a study carried out by the Organisation of Consumers and Users (OCU), which has analysed the functionality of cycling infrastructure in 14 cities: the eight most populated and six others that are included because of the boost they are giving to bicycles and personal mobility vehicles.

This organisation believes that *"a useful cycling network should meet seven criteria: it should be complete, continuous, uniform, direct, recognisable, dense and on main roads. If it is a useful network, it will also be safer,"* (OCU, 2022, pág. 5). The result of the study is shown in Table 4:



## Valoración de las redes ciclistas

Vías ciclistas	FUNCIONALIDAD DE LAS REDES							CALIFICACIÓN GLOBAL	RESPECTO A 2013
	Completa	Continua	Uniforme	Directa	Reconocible	Por vías principales	Tupida		
VITORIA	★★★★★	★★★★★	★★★★	★★★★	★★★★★	★★★★★	★★★★★	★★★★★	▲
SEVILLA	★★★★★	★★★★★	★★★★★	★★★★	★★★★	★★★★★	★★★★	★★★★★	▼
VALENCIA	★★★★★	★★★★★	★★★★	★★★★	★★★★★	★★★★	★★★★	★★★★★	▲
BARCELONA	★★★★	★★★★	★★★	★★★★★	★★★★★	★★★★★	★★★★	★★★★★	▲
SAN SEBASTIÁN	★★★	★★★	★★★	★★★★	★★★	★★★★	★★★	★★★★	▼
ZARAGOZA	★★★	★★★	★★	★★★★	★★★	★★★★	★★★	★★★	▲
CÁDIZ	★★★	★★★	★★★	★★★	★★★★	★★★	★★★	★★★	▲
LAS PALMAS	★★★	★★★	★★★★	★★★	★★★	★★★	★★	★★★	▲
VALLADOLID	★★	★★	★★	★★★	★★★	★★★	★★	★★★	▲
BILBAO	★★	★★	★★	★★	★★★	★★	★★	★★	▲
MÁLAGA	★★	★★	★★	★	★★★	★★★	★	★★	▲
CÓRDOBA	★★	★★	★	★★	★★	★★	★	★	=
LA CORUÑA	★	★	★	★	★★	★	★	★	▲
MADRID	★	★	★	★★	★	★	★	★	=

Table 4. OCU's assessment of cycling infrastructure in 14 cities.

Source: <https://www.ocu.org/coches/bicicletas-electricas/noticias/mejores-ciudades-para-bicis>

As can be seen in the table, although Malaga has improved compared to the last study carried out in 2013, it is still poorly rated with regard to the functionality of its cycle networks, with the OCU study concluding that it "also regrets the use of the bike lane, which is nothing more than a bicycle painted on the road with a 30 km/h sign, leaving cyclists at the mercy of cars." (OCU, 2022, pág. 9)

Another of the conclusions reached, as published in the Diario Sur newspaper article entitled "Malaga's cycle lanes, at the back of the national pack", is that "the OCU study describes the cycling network in the city of Malaga as 'bad' because it is insufficient and unconnected and criticises the abuse of the 30km/h lanes 'which leave cyclists at the mercy of cars'." (Jiménez, F., 2022, pág. 1)

Similarly, the image below specifically shows an erroneously designed cycle network in the Trinidad and Perchel area of Malaga, on which it is stated *"the road makes a detour and does not use the main road, which it crosses in a straight line."*



**La vía da un rodeo y no usa la calle principal que atraviesa en línea recta.**

*Image 3. Example of Malaga's poorly designed cycling network.*

Source: <https://www.ocu.org/coches/bicicletas-eléctricas/noticias/mejores-ciudades-para-bicis>

## 5. ROAD ACCIDENTS INVOLVING PMVs

### 5.1 ANALYSIS OF PMV ROAD ACCIDENT RATES IN MALAGA

This section is the main pillar of this study given the author's concern about the growing number of road accidents arising from the use of electric scooters in general, and particularly in Malaga city.

In the world of road safety, of which we are all a part in one way or another, the primary and most important objective is to reduce the number of road accidents and thus the many personal and social consequences that these entail. That is why the report of the World Health Organisation (WHO) was drafted and then published on 20 June 2022. (OMS, 2022, pág. 1)

In addition, the WHO and the UN Regional Commissions, in cooperation with UN Road Safety Collaboration partners and other stakeholders, have developed the "Global Plan for the Decade of Action for Road Safety 2021-2030", (OMS, 2021, pág. 30) which concludes with the following message:

This global road safety action plan calls on governments and stakeholders to take a new path that emphasises safety as a core value within the safety and sustainable mobility system. We know what we have to do, we have the tools to do it and we all have a role to play. So, let's do it.



In light of the final sentence of the previous paragraph, and with the aim of understanding the evolution of road accidents involving PMVs in Malaga during the period of four calendar years between 2019 and 2022, a series of graphs below show the existing statistical information in the database of the Accident Investigation and Attestation Group (GIAA) of the Malaga Local Police.

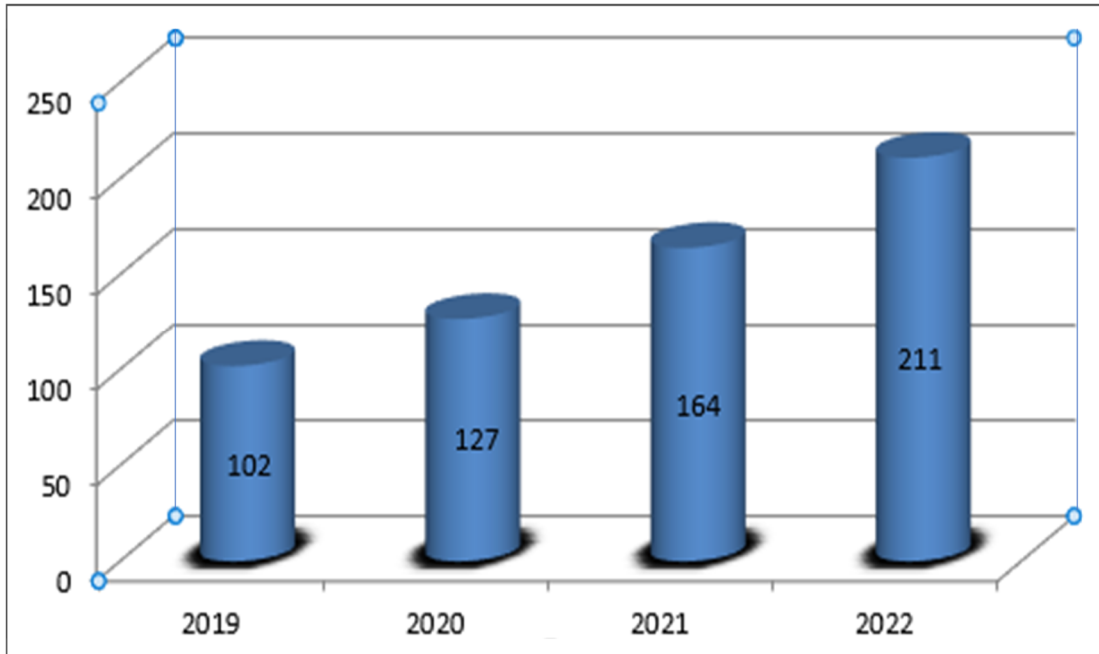


Figure 1. Statistics and results of road accidents involving PMVs in Malaga during the years 2019, 2020, 2021 and 2022. Source: created by the authors based on statistical data from the Malaga Local Police Force, as recorded in the GIAA.

This graph clearly shows the growing trend in the number of road accidents involving PMVs in Malaga over the last four years, with an increase in the number of accidents from 102 in 2019 to 211 in 2022, an increase of 106%. Despite the 604 accidents of this type during this four-year period, it is worth noting that, fortunately, no road accident involving a PMV has resulted in a fatality in Malaga.

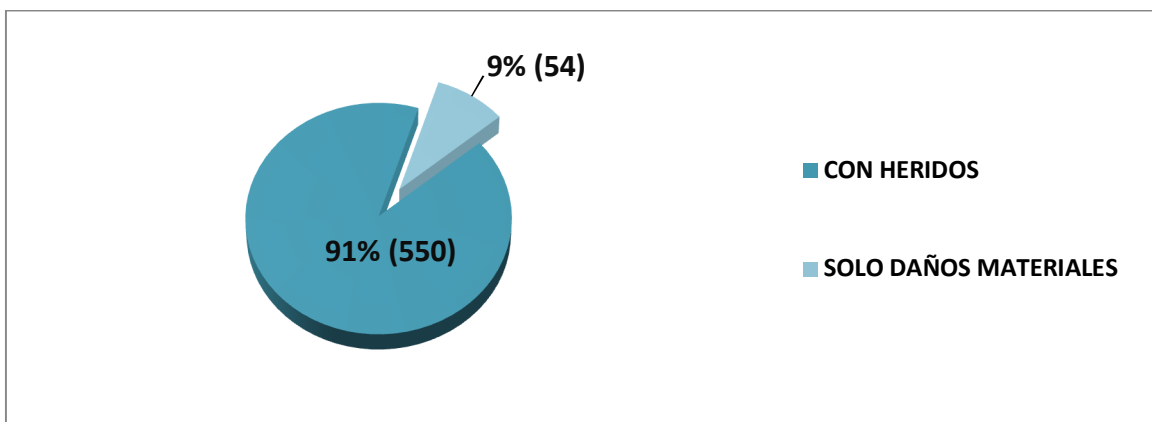
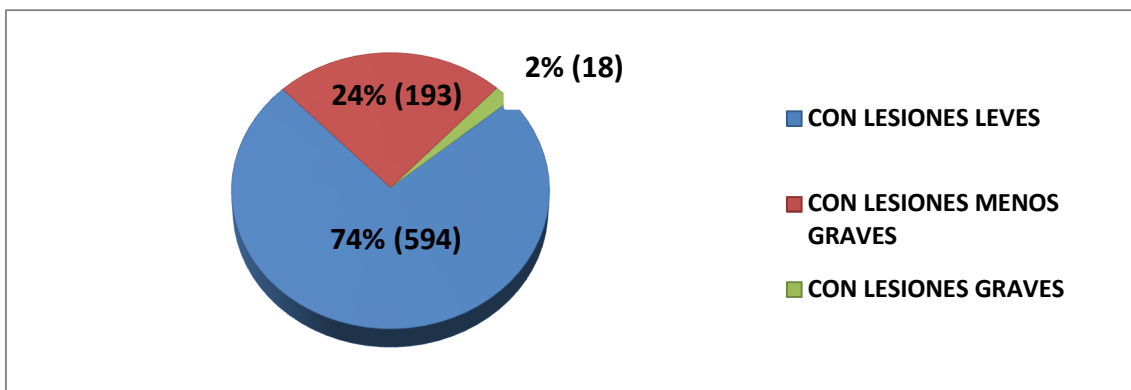


Figure 2. Total percentage of PMV road accident outcome type in Malaga from 2019 to 2022. Source: created by the authors based on statistical data from the Malaga Local Police Force, as recorded in the GIAA.

In terms of the consequences of these road accidents, Figure 2 shows that the average for this time period reflects the total is divided between 9% material damage (54 road accidents) and 91% personal injury (550 road accidents).

Similarly, an analysis of the statistics on the total number of such road accidents according to the type of accident during the period covered by the study shows that there are three main types of road accidents: head-on collision (252), two-wheeled vehicles falling (112), and people being run over (98), which account for 76.5% of the total.

With regard to the causality of these road accidents, once the statistical data in the GIAA has been verified, it can be stated that the main cause of these accidents was "distracted or inattentive driving", with a total of 72 cases, closely followed by "lack of skill" and "failure to respect traffic light signals", with 71 road accidents resulting from these two. The sum of these three causal events corresponds to 35% of the total.



*Figure 3. Percentage of people injured in the accidents covered by this study, classified according to the severity of the injuries. Source: created by the authors with statistical data extracted from the Accident Reports in the GIAA of the Malaga Local Police.*

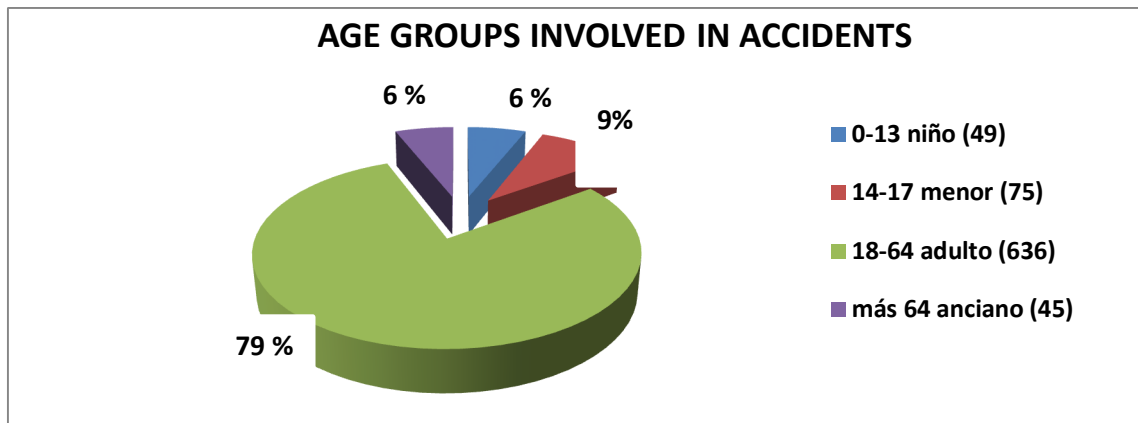
In terms of the severity of the injuries suffered by the people involved in road accidents involving electric scooters, Figure 3 shows that out of a total of 805 people injured, minor injuries account for almost two thirds of all injuries, followed by less serious injuries, with serious injuries accounting for a minimal percentage. These results show that the vast majority of the road accidents described are minor-injury crashes, i.e. without hospitalisation or with a hospital stay of less than 24 hours and without medical or surgical treatment. (Parlamento Español, 2014, págs. 97966-97967)

Also, as shown in Table 5 below, the number of people injured has increased significantly between 2019 and 2022, from 91 to 379, an increase of 316%, while the severity of injuries has also increased.

YEARS	SEVERITY OF INJURIES				
	MINOR	LESS SERIOUS	SERIOUS	DEATH	OVER ALL
<b>2019</b>	81	7	3	0	91
<b>2020</b>	100	20	4	0	124
<b>2021</b>	133	76	2	0	211
<b>2022</b>	280	90	9	0	379
<b>OVERALL</b>	<b>594</b>	<b>193</b>	<b>18</b>	<b>0</b>	<b>805</b>

*Table 5. People seriously injured as a result of being involved in a road accident with a PMV in Malaga from 2019 to 2022. Source: created by the authors with statistical data belonging to GIAA.*

To conclude this analysis, Figure 4 shows the classification of the injured people by age group. The above Figure clearly shows that 79% of the accident victims included in this study belong to the adult age group, i.e. between 18 and 64 years of age, followed at a considerable distance by minors (9%) between 14 and 17 years of age, with children and the elderly being the fewest, with 6% each.



*Figure 4. Percentage of age groups of people involved in road accidents with PMVs in Malaga in the last four years. Source: created by the authors with statistical data belonging to GIAA.*

As a partial synthesis of the observation and analysis of the data, tables and figures shown in this study, it can be seen that:

- There was a notable increase in the number of road accidents under analysis, specifically a 106% increase, in the period under study.
- There were no fatal road accidents involving a PMV.
- 91% of these accidents resulted in injuries to people.
- The most frequent type of accident was a head-on collision, with the main cause being "inattentive or distracted riding."

- 74% of the injuries were minor.
- The most affected age group was adults (18–64 years old), with 79% of the total.

## 5.2 COMPARATIVE ANALYSIS WITH NATIONAL STATISTICS AND REFERENCE TO THE ROAD SAFETY STRATEGY 2021-2030

In order to prepare this section, and due to the lack of specific open sources in this respect, statistical data has been requested from the Observatory of the Directorate General of Traffic, specifically the rates of road accidents involving PMVs across the whole of Spain in the period between 2019 and 2022. The data provided by this public body is verified and analysed in the following Table 6, which summarises the most interesting results:

<b>YEARS PROVIDED</b>	<b>DEAD WITHIN 24 HOURS</b>	<b>HOSP. INJURY WITHIN 24 HOURS</b>	<b>NON-HOSP. INJURY WITHIN 24 HOURS</b>	<b>TOTAL ACCIDENTS</b>
<b>2020</b>	8	96	1074	1277
<b>2021</b>	9	166	2017	2389
<b>2022</b>	8	-----	-----	-----

*Table 6. Summary statistics on road accidents involving PMVs in Spain in 2020, 2021 and 2022, differentiated by injury severity. Source: created by the authors with statistics provided by the DGT Observatory.*

The comparative summary of the accidents under study in the whole of Spain compared to Malaga shows a great similarity as:

- The increase accounted for 87% of all road accidents in Spain, while in the city of Malaga it was 106%.
- 84% of these accidents resulted in minor injuries within 24 hours, a figure very similar to the 74% in Malaga.

To conclude this section, it is worth mentioning what is stated in the Road Safety Strategy 2021-2030 in terms of the micromobility of PMVs on urban roads, differentiating between the general and specific objectives, as well as the direct and indirect references to this type of vehicle in chapter 8 of the aforementioned document "Strategic Areas"(Ministerio del Interior, DGT, 2022, págs. 130-259):

- The overall objective for 2030 consists of "reducing the number of fatalities and serious injuries by 50% compared to the 2019 baseline". (Ministerio del Interior, DGT, 2022, pág. 122)
- Among the specific objectives for 2023, (Ministerio del Interior, DGT, 2022, pág. 123) we find that:

Vulnerable groups and means of transport are considered a priority due to their increasing presence in fatal and serious accidents, as well as the prospects of an increase in these modes of mobility: pedestrians and users of personal mobility vehicles, bicycles, mopeds and motorbikes. People over 64 years of age, and urban roads.

### 5.3 COMPARATIVE ANALYSIS WITH INTERNATIONAL STATISTICS FOR THE CITY OF LISBON

According to the Portuguese National Institute of Statistics (INE, 2022, pág. 1), Lisbon has a population of 544,851 inhabitants, very similar to that of Malaga, with 579,076 inhabitants.

In order to contrast the data of this study, statistical records of road accidents involving PMVs during the period from 2019 to 2022, specifically those involving electric scooters (in Portuguese, *trotineta*), were requested from the (PSP) of the city of Lisbon.

	<b>MATERIAL INJURIES</b>	<b>MINOR</b>	<b>SERIOUS</b>	<b>DEATH</b>	<b>OVERALL</b>
<b>2019</b>	23	55	2	0	80
<b>2020</b>	5	13	0	0	18
<b>2021</b>	18	75	3	0	96
<b>2022</b>	30	128	0	0	158
<b>OVERALL</b>	76	271	5	0	352

*Table 7. Summary of road accident data involving electric scooters (trotinetas) in the city of Lisbon from 2019 to 2022. Source: created by the authors based on data provided by the Polícia de Segurança Pública of the city of Lisbon.*

Comparing this data with that of Malaga during the same period, it can be seen that:

- The total number of road accidents in Lisbon (352) was lower than in Malaga (604), which means that 42% more accidents occurred in the capital of Malaga.
- The increase in road accidents between 2019 and 2022 was 97.5%, similar to the 106% increase in Malaga.
- Minor injuries in these accidents accounted for 77%, a figure very similar to that of Malaga, where they accounted for 74%.
- In both capitals, there have been no fatalities so far in road accidents involving electric scooters.

## 6. THE OPINION OF EXPERTS IN THE FIELD

In order to obtain a broader and more technical view of the subject matter of this study, and to serve as a complement to it, we considered it appropriate to obtain the opinion of a number of experts in the field, as well as of different actors who, in one way or another, are related to urban micromobility and PMVs or electric scooters.

In order to address the issue across as many disciplines as possible, interviewees were chosen from among people of recognised prestige in the political, police and health fields, including electric scooter users.

Below is a general summary of the respondents' answers for this study, which were common to all of them.

Regarding the following question:

*In general, and from your point of view as a citizen, what is your opinion of PMVs in your city?*

The answers were, in summary:

- It has been a breakthrough in urban mobility.
- It is a useful and sustainable means of transport.
- PMVs are here to stay.
- They pose a risk and are unsafe as they travel on pavements and in pedestrian areas.
- It requires time for adaptation, awareness and road training.
- They are reducing the presence of combustion vehicles in micromobility, making journeys more sustainable. They also take up little space, are easy to park and do not require any type of driving licence.

Regarding the following question:

*With regard to the Road Safety Strategy 2021-2030, do you think it is feasible to reach the objective of reducing road accidents by 50% by 2030? Explain the answer from your professional perspective.*

The answers were, in summary:

- It is possible but highly unlikely that that goal will be achieved given the idiosyncrasies and mentality of our governments.
- To achieve this goal, it is vital to improve legal regulation, enhance road infrastructure and increase road awareness campaigns.
- Similarly, it is necessary to act in a multidisciplinary way by drawing up a series of recommendations aimed at reducing road accidents, such as: more speed, breathalyser and drug controls, photo-red light systems, road safety audits, etc.

## 7. ANALYSIS OF THE RESULTS

After an analytical and objective study of each of the sections presented, the following results can be summarised.

Based on the analysis of all the national and local regulations mentioned in section I, and taking into consideration the opinion of the experts consulted on the subject, it can be stated that it is vitally important to improve the national regulatory framework and, consequently, the local framework. This would mainly concern the obligation to have civil liability insurance, set a uniform minimum age for riders throughout Spain and use protective helmets and reflective elements that improve the visibility of these vehicles. All of this is in the interests of guaranteeing road safety.

As a summary of section II and bearing in mind that Malaga has the largest number of two-wheeled vehicles in Spain, it can be stated that it would be imperative to have a larger number of staff than at present to be able to control and monitor the mostly improper behaviour of electric scooter riders, as detailed in the analysis of reported offences and the surveys and reports of insurers shown. On the other hand, it is also important to

establish and plan a series of specific preventive campaigns on compliance with traffic legislation for PMVs.

From the research in section III, together with the criteria of experts and users in the field, and with the aim of organising and pacifying urban traffic in order to guarantee road safety for all those involved and reduce the number of road accidents involving this clearly increasing micromobility, it can be stated that the current road infrastructure for PMVs in Malaga is deficient. Therefore, it is necessary to implement the projects that are currently being processed and to make more municipal investment in the short and medium term in this regard, thus responding to the social and road demand of a city with a superlative projection.

After carrying out the aforementioned comparative analysis in section IV, it can be stated that the number of road accidents involving this type of vehicle in Malaga has increased by 106% in the last four years, and it is vitally important to tackle this quantitative problem.

## **8. CONCLUSIONS AND PROPOSALS FOR IMPROVEMENT**

### **8.1 CONCLUSIONS**

The research carried out has shown that there is currently a problem related to PMV micromobility in Malaga in particular and in all the geographical areas studied in general. This is due to the increasing and disproportionate growth of both this form of mobility and the accidents in which these vehicles are involved. Therefore, it is advisable to adopt measures aimed at reducing the negative consequences of their use, in line with the road safety objectives set in the medium and long term by both the European and national authorities through the ESV (Spanish Road Safety Strategy) 2021-2030.

Bearing in mind that Spain generally regulates on the basis of the different social realities that coexist and that this type of urban mobility is still in development – around 5 or 6 years – it can be predicted that, as the Director of the DGT says, it will not be long until the national legislator addresses this issue, leaving local regulations to resolve less important matters.

As far as Malaga City Council and its Local Police Headquarters are concerned, given the current social, tourist, demographic and cultural relevance of the city, it is necessary to have an adequate number of police officers and suitable road infrastructure for the circulation of bicycles and/or electric scooters, in accordance with its urban potential.



	<b>TOTAL ACCIDENTS % INCREASE</b>	<b>% MINOR INJURIES</b>	<b>% SERIOUS INJURIES</b>	<b>DEATH % TOTAL</b>
<b>MALAGA</b>	106%	74%	26%	0.00%
<b>SEVILLE</b>	86%	60%	40%	0.25%
<b>PROVINCES</b>	87%	84%	16%	0.27%
<b>LISBON</b>	97.5%	77%	2%	0.00%

*Table 8. Summary of total number of road accidents involving PMVs and injured people according to severity, in the geographical and temporal fields studied, expressed as percentages. Source: created by the authors with all the statistical data provided for the creation of this report.*

The most significant conclusions are that the initial suspicion of this problem has had both a negative and a positive result. On the one hand, the total increase in road accidents involving electric scooters observed in all the geographical areas studied is concerning, but on the other hand, it is gratifying to note that the resulting injury of these accidents is low or minor, with a minimum number of fatalities, as shown in Table 8 above.

Similarly, having analysed the causality variables and types of accidents studied, and having heard the reflections of experts in the field, it is clear that if scooter riders do not require theoretical and practical knowledge of road traffic circulation, there are major and multiple disadvantages both for the riders themselves and for other road users, thus posing a risk to road safety in general.

Furthermore, it can be stated that there is a considerable quantitative problem of road accidents involving electric scooters and that the adoption of measures aimed at correcting the errors detected and referred to in this article would probably reduce both the number of accidents and their consequences, even if the results of these accidents are mostly minor given that these vehicles circulate at reduced or moderate speed if not manipulated.

## 8.2 PROPOSALS FOR IMPROVEMENT

Following the analysis of the results of the various parameters considered in this article, we propose adopting a set of national and local measures for PMVs whose implementation could lead to significant improvements in road safety:

- 1) Adapt and improve national legislation on traffic to the current social and road situation of these vehicles, regulating the obligation for drivers to have knowledge of traffic, to ride with a protective helmet and reflective elements that improve the visibility of the driver and the scooter, to have civil liability insurance that covers at least the basic guarantees and to have a minimum age for driving them.
- 2) Include a compulsory subject on road safety in the primary and/or secondary education system because, in one way or another, each and every person on this planet is a road user and it is therefore vital to have adequate road safety education and awareness for the sake of general well-being.

- 3) Incorporate a special campaign for the surveillance and control of electric scooters in urban areas, including all the actors involved in this type of micromobility, into the annual calendar of traffic campaigns published by the DGT, and include specific local campaigns in this regard, with due dissemination and communication through the different media.
- 4) Take advantage of existing mapping and geo-positioning technology to prevent and deter encroachment on pavements by these vehicles, using the corresponding "auto-off" in case of non-compliance.
- 5) Have a municipal census of private and rental types of these vehicles with the aim of obtaining more information on traffic flows, road demographics, usability, etc. in order to improve the local authority's capacity to respond and react, in terms of adapting urban mobility to the city's road situation.
- 6) Quantitatively and qualitatively strengthen road infrastructure in general to guarantee road safety in the circulation of this vulnerable group, increasing the number of kilometres and the quality of the cycle/PMV lanes and the 30 km/h lanes set up for this purpose, with priority given to these vehicles.
- 7) Carry out speed checks, with fixed and static speed cameras – on tripods and on vehicles – in 30 km/h lanes with priority for cyclists and electric scooter riders in order to offer greater guarantees to these users compared to other vehicles on the road, where they are at a clear disadvantage.
- 8) Intensify alcohol and drug controls, both during the day and at night, for electric scooter riders in certain areas where there is a high concentration of road accidents.
- 9) Reinforce the current cycling unit of the Malaga Local Police with the creation of a PMV police unit, advertise it with the same argumentation as the first one, develop all its police tasks with the convenience, ease and agility that these vehicles represent, and promote the image of acceptance of scooters as a great means of transport.
- 10) Regular monitoring and control of this matter in order to analyse the variations that the problem studied may present in its various facets, with special emphasis on those that may be due to the adoption of both national and local road measures that affect PMVs in Malaga.

**BIBLIOGRAPHY**

- AMV. (14 February 2018). <https://www.amv.es/territorio-amv/consejos-amv/ID/1177/historia-de-la-motocicleta>. Accessed on 26 September 2023, from <https://www.amv.es/territorio-amv/consejos-amv/ID/1177/historia-de-la-motocicleta#:~:text=El%203%20de%20abril%20de,su%20aut%C3%A9ntico%20punto%20de%20partida%E2%80%93>
- National Association of Companies in the Two-Wheeler Sector, ANESDOR. (26 April 2020). Report: Las Dos Ruedas en España: Gerona, Málaga y Granada son las provincias más moteras de España (Two-Wheelers in Spain: Gerona, Malaga and Granada are the most biker-friendly provinces in Spain). Accessed on 29 January 2023, from <https://www.anesdor.com/informe-las-dos-ruedas-en-espana-gerona-malaga-y-granada-son-las-provincias-mas-moteras-de-espana/>
- Malaga City Council. (2020). Mobility Department. Accessed on 6 February 2023, from Movilidad en bicicleta y VMP (Bicycle Mobility and PMVs): <https://movilidad.malaga.eu/es/modos-de-movilidad/movilidad-en-bicicleta/>
- Malaga City Council. (2022). Mobility Ordinance of the city of Malaga. Malaga: BOP no. 11.
- Boniface K, McKay MP, Lucas R, Shaffer A, Sikka N. (4 October 2010). Serious injuries related to the Segway® Personal Transporter: a case series. Accessed on 3 March 2023, from VOLUME 57, NUMBER 4, P370-374,: <https://doi.org/10.1016/j.annemergmed.2010.06.551>
- Boutilier G., et al. (15 May 2012). Spasticity changes in SCI following a dynamic standing program using the Segway. Accessed on 4 March 2023, from Spinal Cord volume 50, pages 595-598: DOI: 10.1038/sc.2012.23
- Chamber of Auditors of Andalusia. (01 July 2000). OPERATIONAL AUDIT OF LOCAL POLICE STAFFING AND COSTS IN PROVINCIAL CAPITAL CITY COUNCILS IN 2000. Accessed on 29 January 2023, from Operational audit of local police staffing and costs in provincial capital city councils in 2000: <https://www.cuentas.es/public/modules/report/downloader.php?file=216&type=r esume>
- DGT. (2019). La acera es para los peatones. Tráfico y Seguridad Vial (The pavement is for pedestrians. Traffic and Road Safety) revista.dgt.es, 6.
- DGT, Road Safety Observatory. (2022). Europa: radiografía de la movilidad en bici y patinete. Tráfico y Seguridad Vial (Europe: X-ray of bicycle and scooter mobility. Traffic and Road Safety), 60.
- LÍNEA DIRECTA Foundation. (27 April 2022). Report: Nueva Movilidad Urbana y Seguridad Vial. Accidentalidad en la nueva cultura del desplazamiento (New Urban Mobility and Road Safety. Accidents in the new culture of displacement). Accessed on 18 March 2023, from [https://www.fundacionlineadirecta.org/sala-de-prensa/-/asset\\_publisher/3polfsFvW0wN/content/nueva-movilidad-urbana](https://www.fundacionlineadirecta.org/sala-de-prensa/-/asset_publisher/3polfsFvW0wN/content/nueva-movilidad-urbana)

- Gómez-Cabrero S. (July 2016). Plan de negocio para una empresa de comercialización y desplazamiento con Hoverboard (Business plan for a hoverboard marketing and travel company). Accessed on 4 March 2023, from Repositorio institucional de la Universidad Politécnica de Valencia (Universidad Politécnica de Valencia Institutional Repository) Page 24: <https://riunet.upv.es/bitstream/handle/10251/68754/G%c3%93MEZ-CABRERO%20-%20Plan%20de%20negocio%20para%20una%20empresa%20de%20comercializaci%c3%b3n%20y%20desplazamiento%20con%20Hoverbo....pdf?sequence=1&isAllowed=y>
- Ignacio, L. (25 October 2021). Diario Sur. Accessed on 30 January 2023, from La DGT inicia una campaña especial de control de bicis y patinetes en las aceras (The DGT starts a special campaign to control bicycles and scooters on pavements): <https://www.diariosur.es/malaga/dgt-multa-bici-patinete-20211025135142-nt.html>
- INE. (May 2022). Census 2021 Portugal. Accessed on 19 March 2023, from the Bureau of Diplomatic Information. Portuguese Republic country profile: [https://www.ine.pt/scripts/db\\_censos\\_2021.html](https://www.ine.pt/scripts/db_censos_2021.html)
- National Institute of Statistics. (1 January 2022). <https://www.ine.es/>. Accessed on 21 January 2023, from <https://www.ine.es/>: <https://www.ine.es/jaxiT3/Datos.htm?t=2882>
- Jiménez, F. (27 June 2022). Diario Sur. Accessed on 10 February 2023, from Málaga, a la cola de las grandes ciudades en carriles bici (Malaga, at the bottom of the list of major cities in terms of cycle lanes): <https://www.diariosur.es/malaga-capital/malaga-cola-grandes-ciudades-carriles-bici-movilidad-20220620182959-nt.html>
- Jiménez, F. (27 January 2022). Diario Sur. Accessed on 9 February 2023, from Los carriles bici de Málaga, a la cola del pelotón nacional (Malaga's cyle lanes, at the back of the national pack): <https://www.diariosur.es/malaga-capital/carriles-bici-malaga-ocu-suspende-20220127155114-nt.html>
- Regional Government of Andalusia. (19 December 2022). Institute of Statistics and Cartography of Andalusia. Accessed on 6 February 2023, from Multi-territorial Information System of Andalusia: <https://www.juntadeandalucia.es/institutodeestadisticaycartografia/sima/ficha.htm?mun=29067>
- La Vanguardia, B. (2 June 2022). Un patinete eléctrico adelanta a un coche a 100 km/h (y dos infracciones más) (An electric scooter overtakes a car at 100 km/h (and two other offences)). Accessed on 3 March 2023, from (<https://www.lavanguardia.com/motor/movilidad/20220602/8311086/patinete-electrico-adelanta-coche-100-km-h-dos-infracciones-mas-pmv.html>).
- Landaverde, LF et al. (2013). Monociclo eléctrico (Electric unicycle). Accessed on 14 January 2023, from University Repository of the Faculty of Architecture. Page 33: <https://repositorio.fu.unam.mx/handle/123456789/16665>.
- López J. (4 February 2019). El 67% de los españoles utilizaría vehículos de movilidad personal en caso de restricciones al tráfico (67% of Spaniards would use personal mobility vehicles in case of traffic restrictions). Accessed on 4 March 2023, from <https://movilidadelectrica.com/vehiculos-de-movilidad-personal/>

- Malavé, S.J. (2018). La Seguridad del Transporte Terrestre: Retos y Perspectivas (Land Transport Security: Challenges and Perspectives). Social and Economic Sciences. UTEQ, Volume 2, No. 1 Pages 4-6.
- Mellado, L. (2022). Leyes de Tránsito Antiguas (Historia) (Ancient Traffic Laws (History)). Accessed on 1 January 2023, from From the gallows to the fine: <https://automoviles.emol.com/noticias/246/leyes-de-trnsito-antiguas-historia.html>
- Ministry of the Interior, DGT. (2016). Instruction 16/V-124 Subject: Personal Mobility Vehicles. Madrid: dgt.es.
- Ministry of the Interior, DGT. (2019). INSTRUCTION 2019/S-149 TV-108 Subject: Technical clarifications and criteria for the formulation of complaints for light-duty vehicles powered by electric motors. Madrid: dgt.es.
- Ministry of the Interior, DGT. (June 2022). Road Safety Strategy 2030. Accessed on 21 March 2023, from National Observatory of Road Safety: [https://seguridadvial2030.dgt.es/export/sites/sv2030/.galleries/descargas/Estrategia\\_de\\_Seguridad\\_Vial\\_2030.pdf](https://seguridadvial2030.dgt.es/export/sites/sv2030/.galleries/descargas/Estrategia_de_Seguridad_Vial_2030.pdf)
- Mircea A. (7 April 2004). Protección de la Salud de la Población a través de la Reducción de Accidentes de Tránsito (Protecting the Health of the Population by Reducing Traffic Accidents). Accessed on 14 January 2023, from La Seguridad Vial no es un Accidente (Road Safety is not an Accident). Page 11: <https://heinonline.org/HOL/Page?handle=hein.journals/drtom2004&id=153&collection=journals&index=>
- Moreno, S. (22 February 2021). La Vanguardia. Accessed on 2 February 2023, from <https://www.lavanguardia.com/motor/actualidad/20210222/6250900/dgt-establecera-edad-minima-conducir-patinetes-electricos.html>
- OCU. (27 January 2022). Las mejores ciudades para ir en bici (The best cities for cycling). Accessed on 10 February 2023, from <https://www.ocu.org/coches/bicicletas-electricas/noticias/mejores-ciudades-para-bicis>
- WHO. (20 October 2021). Global plan for the decade of action for road safety 2021-2030. Accessed on 1 March 2023, from [https://cdn.who.int/media/docs/default-source/documents/health-topics/road-traffic-injuries/21323-spanish-global-plan-for-road-safety-for-web.pdf?sfvrsn=65cf34c8\\_35&download=true](https://cdn.who.int/media/docs/default-source/documents/health-topics/road-traffic-injuries/21323-spanish-global-plan-for-road-safety-for-web.pdf?sfvrsn=65cf34c8_35&download=true)
- WHO. (20 June 2022). Road traffic injuries. Accessed on 1 March 2023, from <https://www.who.int/es/news-room/fact-sheets/detail/road-traffic-injuries>
- Spanish Parliament. (2014). Order INT/2223/2014, of 27 October, regulating the communication of information to the National Register of Traffic Accident Victims. Madrid, No. 289, 29 November 2014, pp. 97952-97967 (16 pp.): BOE-A-2014-12411.
- Spanish Parliament. (2020). Royal Decree 970/2020, of 10 November, amending the General Traffic Regulations and the General Vehicle Regulations, with regard to urban traffic measures. Madrid, "BOE" no. 297, 11 November 2020, pages 98638 to 98643 (6 pp.): BOE-A-2020-13969.
- Spanish Parliament. (2021). Act 18/2021, of 20 December, amending the TRLTSV with regard to the points-based driving licence. Madrid, "BOE" no. 304, 21 December 2021, pages 156147 to 156170 (24 pages): BOE-A-2021-21006.

- Spanish Parliament. (2022). Resolution of 12 January 2022, of the Directorate General of Traffic, approving the Manual of characteristics of personal mobility vehicles. Madrid, "BOE" no. 18, 21 January 2022, pages 6882 to 6915 (34 pages): BOE-A-2022-987.
- Pascual, A. (18 November 2021). El Confidencial.com. Accessed on 8 February 2023, from El timo de los carriles 30: nadie los respeta, apenas hay multas y el ciclista está vendido (The 30km/h-lane scam: no one respects them, there are hardly any fines and the cyclist is sold out): [https://www.elconfidencial.com/espana/madrid/2021-11-18/carril-30-ciclismo-madrid-timocarril-accidente\\_3325152/](https://www.elconfidencial.com/espana/madrid/2021-11-18/carril-30-ciclismo-madrid-timocarril-accidente_3325152/)
- Puig J. (1999). La bicicleta: un vehículo para cambiar nuestras ciudades (The bicycle: a vehicle to change our cities). Accessed on 3 January 2023, from Ecología Política (Political Ecology) Page 1: [www.dialnet.unirioja.es](http://www.dialnet.unirioja.es)
- Recuento, P. (5 January 2015). Historia de las señales de tráfico. Origen y primeros pasos de las señales de tráfico (History of road signs. Origin and first steps of traffic signs). Accessed on 20 December 2022, from Autofácil: <https://www.autofacil.es/senales-trafico/historia-senales-trafico/75527.html>
- Sala, A. (22 November 2022). Los misterios de la momia. La muerte de Tukankamón, probablemente atropellado (The mysteries of the mummy. The death of Tukankhamun, probably by being run over). Accessed on 3 March 2023, from [https://historia.nationalgeographic.com.es/a/muerte-tutankamon-probablemente-atropellado\\_7755](https://historia.nationalgeographic.com.es/a/muerte-tutankamon-probablemente-atropellado_7755)
- Sanchez, S. (23 October 2022). El Español. Accessed on 9 February 2023, from La gran apuesta de Málaga por los carriles bici: su plan director dibuja casi 100 kilómetros de red (Malaga's big bet on cycle lanes: its master plan outlines almost 100 kilometres of network): [https://www.elespanol.com/malaga/malaga-ciudad/20221023/gran-apuesta-malaga-carriles-director-dibuja-kilometros/711678928\\_0.html](https://www.elespanol.com/malaga/malaga-ciudad/20221023/gran-apuesta-malaga-carriles-director-dibuja-kilometros/711678928_0.html)
- Sawatzky B. et al. (November 2007). . The Segway Personal Transporter as an alternative mobility device for people with disabilities: a pilot study. Accessed on 4 March 2023, from VOLUME 88, NUMBER 11, P1423-1428: <https://doi.org/10.1016/j.apmr.2007.08.005>





**Alberto Page de la Azuela**  
Cadet of Guardia Civil  
Degree on Security Engineering from  
the Carlos III University of Madrid

**SPECIAL PUBLIC ROADS OPERATIONS  
WITH A SPEED LIMIT OF UP TO 50 KM/H.  
ANALYSIS, REVIEW AND UPDATE OF THE  
PROCEDURE**





## SPECIAL PUBLIC ROADS OPERATIONS WITH A SPEED LIMIT OF UP TO 50 KM/H. ANALYSIS, REVIEW AND UPDATE OF THE PROCEDURE

**Summary:** 1.- INTRODUCTION. 2.- LEGISLATIVE CONTEXT. 2.1.- Legislative framework providing legal coverage for establishing DOVPS. 2.2.- Legislative framework providing legal coverage for actions of agents DOVPS. 3.- CIVIL GUARD HANDBOOK FOR SPECIAL PUBLIC ROADS OPERATIONS 3.1.- Notice 1/2015 Special Public Road Operations. 3.2.- Civil Guard Handbook for Special Public Roads Operations. 4.- ANALYSIS AND COMPARISON OF SPECIAL PUBLIC ROADS OPERATIONS IN OTHER BRANCHES. 4.1.- Mossos d'Esquadra. 4.2.- National Police Force. 4.3.- French National Gendarmerie. 4.4.- Comparisons with the Civil Guard. 5.- CONCLUSIONS AND POSSIBLE UPDATES IN THE FIELD OF CIVIL GUARD SPECIAL PUBLIC ROAD OPERATIONS. 5.1.- Conclusions. 5.2.- Proposals for future updates. 6.- BIBLIOGRAPHY

**Resumen:** Durante cientos de años, los Dispositivos Operativos en Vías Públicas (DOVP) han sido utilizados con el objetivo de prevenir o reaccionar ante la comisión de infracciones o actos delictivos.

En la actualidad, las Fuerzas y Cuerpos de Seguridad del Estado (FCSE) realizan a diario este tipo de Dispositivos Operativos, por consiguiente, el presente artículo se ha enfocado en el estudio y evaluación de los DOVP del cuerpo de la Guardia Civil en comparación con los de otros cuerpos, con el fin de observar su desarrollo en materia tecnológica y de operatividad, y cómo estos aspectos se relacionan e influyen en la eficacia y la seguridad de los componentes de este.

En último lugar, se han investigado y propuesto diversas actualizaciones con el propósito de mejorarlos en términos tecnológicos y de operatividad, dando como resultado DOVP más eficaces y seguros.

**Abstract:** For hundreds of years, Roadside Operational Devices (DOVP) have been used with the aim of preventing or reacting to the commission of infractions or criminal acts.

Nowadays, the State Security Forces and Corps (FCSE) carry out this type of Operational Devices on a daily basis, therefore, this final degree thesis has focused on the study and evaluation of the DOVP of the Guardia Civil in comparison with those of other forces, in order to observe their development in terms of technology and operability, and how these aspects relate to and influence the effectiveness and safety of its components.

Finally, various updates have been investigated and proposed with the aim of improving them in terms of technology and operability, resulting in more efficient and safer DOVP.

**Palabras clave:** Dispositivos Operativos en Vías Públicas, DOVP, Guardia Civil, Seguridad Ciudadana, Orden Público, Dispositivos Operativos, Seguridad Vial.

**Key words:** Operating devices on public roads, DOVP, Civil Guard, Citizen Security, Public Order, Operating Devices, Road Safety.

**GLOSSARY OF ACRONYMS**

<b>AA</b>	Law Enforcement Officials.
<b>CE</b>	Spanish Constitution.
<b>CNP</b>	National Police Force.
<b>DEC</b>	Static Control Operations.
<b>DOVP</b>	Special Public Road Operation.
<b>DP</b>	Preventive Operations.
<b>DR</b>	Reactive Operations.
<b>FCSE</b>	State Law Enforcement Agencies.
<b>GC</b>	Civil Guard.
<b>GNF</b>	French National Gendarmerie.
<b>LO</b>	Organic Law.
<b>LOSC</b>	Organic Law 4/2015 on the Protection of Citizen Security.
<b>MODOVP</b>	Handbook for Special Public Road Operations.
<b>ME</b>	Mossos d'Esquadra. (Catalan Police Force)
<b>MODOVPGC</b>	Civil Guard Handbook for Special Public Roads Operations.
<b>OP</b>	Law and Order.
<b>SC</b>	Citizen Security.
<b>SV</b>	Road Security.
<b>VP</b>	Public Roads.

## 1. INTRODUCTION

Since the creation of the Civil Guard (hereinafter GC) in 1844, it has been entrusted with the main mission of safeguarding the security and protection of people and their property throughout Spanish territory. The function of traffic and transport surveillance was initially entrusted to the Road Patrol Corps in 1845. Later, in 1941, the Armed and Traffic Police were created, but it was until the creation in 1959 of the Traffic Unit of the Civil Guard that the aforementioned security function was really carried out faithfully. (Guardia Civil, s.f.).

Throughout these almost two centuries, Spanish society has undergone profound political, social and technological changes that have forced the GC to gradually adapt its procedures. Especially since the approval of the 1978 Constitution, which has brought with it new fundamental rights for citizens, and the emergence of different ideological currents that the military police force must face in order to develop and fulfil its functions.

At the same time, the technological revolution that has taken place in recent decades forces the GC to integrate innovations in order to be at the forefront in terms of means and equipment. Changes brought about especially in the telecommunications sector or in the new digital tools that have transformed our way of life, and which have to be taken on board in order to maintain the high standards of service quality that essentially define the GC.

Special Public Roads Operations (hereinafter DOVPs) can be defined, as set out in Notice 1/2015 on Special Public Roads Operations, as a "combination of human, technical and material resources, organised and established by the Corps of the General Police on public roads, both urban and interurban, with the main objective of preventing, maintaining or, where appropriate, restoring public tranquillity". (Ministerio del Interior, 2015). DOVPs are a fundamental tool for various operational units, such as the speciality of Traffic and Public Safety (hereinafter SC), being used as stated in Notice 1/2015 with different objectives linked to road safety (hereinafter SV) and SC, both in urban and interurban areas.

In order to visualise what has been described above, the article will analyse different aspects related to DOVPs such as: the legal framework that surrounds and regulates them, the analysis of the notice and the handbook of application to the GC, the comparison with other police forces, and finally, the presentation of different conclusions as proposals for improvement and modernisation in the current area of competence of the GC, both operationally and in terms of equipment in the light of new technologies.

In short, the aim is to examine in depth the DOVPs of the GC on low-speed roads, with the aim of making proposals that will allow the institution to continue offering citizens the same high level of service and quality with which it has been fulfilling its functions for almost two centuries.

## 2.- LEGISLATIVE CONTEXT

In this initial section, the legislative framework of DOVPs in Spain will be fully reflected. For ease of understanding, two policy areas have been distinguished for analysis.

On the one hand, the one that regulates the establishment of DOVPs themselves, which analysed using a deductive methodology, first analysing the Spanish Constitution and the relevant organic laws, and then focusing on more specific provisions such as Notice 1/2015 on DOVPs. The order of analysis to be followed will be: Constitution, Organic Law 2/1986 on Security Forces, Organic Law 4/2015 on the Protection of Citizen Security and Notice 1/2015, which together gave rise to the Civil Guard Handbook for Special Public Roads Operations (hereinafter MODOVPGC).

On the other hand, the legislative framework with regard to the activity and action of the agents making up DOVPs. As it is not possible to apply the deductive method, the hierarchical and chronological criterion will be used in the successive study of regulations such as Organic Law 11/2007 of the Civil Guard, Organic Law 3/2018 on Data Protection or the Instructions on detentions and searches.

Finally, in the event of a clash of legal spheres of application where the same rule affects both, it will be analysed in the field relating to the establishment of DOVPs, as this is of a broader nature.

## 2.1.- LEGISLATIVE FRAMEWORK PROVIDING LEGAL COVERAGE FOR ESTABLISHING DOVPs

- Spanish Constitution: Article 104 of the Spanish Constitution (hereinafter EC) expressly establishes the functions entrusted to the State Security Forces and Corps (hereinafter FCSE), which include the GC. These functions are to safeguard citizens' rights and freedoms and to ensure security.

Likewise, the precept determines that these institutions are under the hierarchical dependence of the Government and that their different tasks will be developed through an Organic Law (hereinafter LO). In this way, the Constitution clearly defines the powers granted to the FCSE, which are centred on protecting personal and collective security within the constitutional framework, while at the same time establishing their subjection to the Executive and the necessary legal coverage by means of such a regulation. (Congreso de los Diputados, s.f.).

- Organic Law 2/1986 on Security Forces and Corps: regulates various aspects related to the functions of the GC and DOVPs. In its Title I, it establishes basic principles of action for the security forces, such as complying with the legal system or treating detainees correctly. It emphasises the monitoring of principles such as proportionality, timeliness and congruence. It also gives officers the status of authority. Title II includes the GC within the FCSE. It entrusts functions for the protection of citizens' rights and freedoms, as well as SC related to crime prevention, law and order (hereinafter referred to as OP) and crime investigation. In short, the law regulates fundamental aspects of policing in accordance with democratic principles, recognising both the powers of the GC and security powers related to DOVPs. (Jefatura de Estado, 1986).
- Organic Law 4/2015: its main purpose is to give legal effectiveness to certain declarations of the EC and previous legislation, linked to the free exercise of rights and the protection of the SC.

In its Chapter I, entitled Preliminary Provisions, Title I establishes in Article 1 the purpose of safeguarding individual freedoms and rights, while guaranteeing collective order and the protection of persons and property. Article 3 lists among its aims the defence of fundamental rights, the preservation of the OP, respect for the legal system and the prevention of crime. Article 4 subjects police actions to principles such as legality, equality, proportionality and opportunity.

Chapter III confers powers on law enforcement officers (hereinafter referred to as AA) concerning operational arrangements, empowering them to issue orders and prohibitions, to identify persons, restrict traffic, establish controls, carry out checks, conduct body searches and adopt extraordinary security measures in indispensable cases.

Thus, the legal framework underpins and regulates police action in detail, safeguarding the rights of citizens in the context of protecting public security. (Jefatura de Estado, 2015).

- Notice 1/2015: regulates the operational aspects of the operations established by the FCSE on public roads (hereinafter VP) for the purposes of prevention and reaction. To this end, it replaces the previous Notice 1/2008 on this matter. It can be considered the framework document on which the MODOVPGC is based, as it constantly refers to and develops applicable regulations.

In this development, it explicitly mentions laws such as 2/1986 on Security Forces and Organic Law 4/2015 on the Protection of Citizen Security (hereinafter LOSC), as well as Instructions on identifications and detentions. It also alludes implicitly, although without literal citation, to other relevant legislation such as the Data Protection Act, the law regulating GC, the Traffic Act or the CE.

However, the detailed interpretation of articles 16 to 21 of the LOSC stands out, classifying the operations into preventive operations (hereinafter DP) and reactive operations (hereinafter DR) according to the aforementioned legal development.

Based on this systematisation and definition of police competencies, it establishes guidelines, principles and practices that make up the aforementioned handbook, a key body in terms of operations and citizen security. It also refers to the prevention of road accidents. In conclusion, it forms the body of law regulating police action in this area, consistent with the constitutional framework. (Ministerio del Interior, 2015).

## 2.2.- LEGISLATIVE FRAMEWORK PROVIDING LEGAL COVERAGE FOR ACTIONS OF AGENTS IN DOVPs

- Organic Law 11/2007 regulating the rights and duties of members of the Civil Guard: its main purpose is to systematically compile the rights and duties inherent to the exercise of the police function by members of the Civil Guard, a provision that is of singular relevance for the correct development of

DOVPs, given that it establishes precepts such as Article 15, which requires officers to abide by the CE and the legal system as the framework for their actions, in Article 17 which guarantees respect for the physical and moral integrity of all persons, core constitutional principles, in Article 19 which establishes the confidentiality of professional matters, ensuring due confidentiality, and in Article 20 regulating the duty of inter-institutional cooperation in emergencies requiring coordinated action, in such a way that this LO regulates certain rights and obligations which make it possible to ensure that police actions carried out within the framework of the DP and DR are strictly in accordance with the law (Jefatura de Estado, 2007).

- Organic Law 3/2018 on the protection of personal data and guarantee of digital rights: its fundamental purpose is to guarantee the protection of citizens' personal data by establishing a series of safeguards to prevent their improper dissemination and exploitation, which is particularly relevant for the actions of AAs given the characteristics of the information they handle in the performance of their functions relating to DOVPs. Thus, this law is applicable to all police actions under precepts such as Article 8, which regulates the processing of data due to legal obligation, public interest or the exercise of public powers, or Article 27 on the specific processing of data relating to administrative offences and sanctions, in such a way that it establishes the legal guarantees and safeguards required for the management of personal information obtained in the performance of functions relating to the SC. (Jefatura del Estado, 2018).
- Royal Legislative Decree 6/2015 on Traffic, Circulation of Motor Vehicles and Road Safety: its main purpose is the regulation of traffic, the circulation of all vehicles and the SV, granting powers, rules, instructions, definition of infringements and penalties, among others, highlighting the competence granted to the Central Traffic Headquarters for the management, monitoring and reporting of infringements in the VPs, the regulation of alcohol and drug consumption in driving and the establishment of a penalty system with infringements and penalties in traffic and SV. (Ministerio del Interior, 2015).
- Instruction 12/2007 of the State Secretariat for Security on the behaviour required of members of the FCSE to guarantee the rights of persons detained or in police custody: establishes behavioural guidelines for the FCSE in relation to the detention and custody of persons, including guidelines on the timing, duration and rights of the detainee, as well as on the use of force and other aspects of the procedure. The repeal of the identification section of Article 20.2 of the LOSC by Instruction 7/2015 is highlighted (Secretaría de Estado de Seguridad, 2007).
- Instruction 7/2015 of the State Secretariat for Security, on the practice of identification, external body searches and procedures with minors: likewise, it establishes a series of guidelines and procedures for the identification of persons, external body searches and procedures with minors, in accordance with the LOSC. It contains guidelines on the register of police premises and procedures with minors, recalling the legislation in force in this regard. In short, this Instruction aims to regulate these police procedures in the light of the case law of the European Court of Justice. (Secretaría de Estado de Seguridad, 2015).



In this first section, an in-depth study of the legal precepts related to DOVPs has been carried out, differentiating between two legislative frameworks. The first one contains the legal precepts providing legal coverage for the establishment of DOVPs in VPs. The second legislative framework compiles the legal precepts that confer authority and competences to the AAs of DOVPs for their action. In short, an exhaustive analysis has been carried out of the existing legislation binding on DOVPs, both for its creation and for police action in them.

### **3.- CIVIL GUARD HANDBOOK FOR SPECIAL PUBLIC ROADS OPERATIONS**

Over time, DOVPs have changed to adapt to the times in which they lived. In order to regulate and assist in the implementation of these, the FCSE has been progressively equipped with the Civil Guard Handbook for Special Public Roads Operations (hereinafter MODOVP).

The purpose of the current section is to analyse the current MODOVPGC in order to understand its contents, objectives and methods. Due to its significant impact on the handbook, a prior review of Notice 1/2015 is required.

#### **3.1-NOTICE 1/2015 SPECIAL PUBLIC ROAD OPERATIONS**

Notice 1/2015 on Special Public Road Operations is a fundamental piece of the MODOVPGC, as it covers most of the legal precepts and general principles related to these operations. This notice aims to establish rules to ensure the proper functioning of DOVPs and the SC. It also seeks to standardise the procedures and roles of staff involved in their implementation.

The notice is divided into several key sections:

- **Purpose:** The main purpose of this notice is to establish rules to arrange DOVPs and principles of minimum risk and maximum effectiveness. Compliance with current regulations is also sought, in particular, this is reflected in articles 16 to 21 of the LOSC. Secondary missions include standardising procedures and distinguishing between possible situations to ensure SC.
- **Conditions:** It lists the conditions necessary for DOVPs to be protected by the notice. This includes adequate signage, appropriate location, sufficient staff and resources, and respectful and proportional behaviour on the part of officers. DOVPs for construction sites, accidents or situations where authorities order directions in moving vehicles are not included.
- **Legal Assumptions foreseen for Establishing DOVPs:** It is based on articles 16 to 21 of the LOSC and lists the legal assumptions for the implementation of DOVPs, ordered according to their severity.
- **Types of Special Operations:** DOVPs are divided into two main categories: DPs and DRs, their classification being determined by the nature and purpose of the operations. DPs are geared towards detection and prevention of violations, while DRs are deployed in response to situations of OP disruption.

DPs need to be appointed on a service order to enjoy full legal guarantees, requiring a specific designation and a close link to the mission and duties of

the service in question. This is because, if the above is not fulfilled, it would be an improvised operation depending on the circumstances, i.e., it would be a DR. During the execution of these operations, AAs will be able to request the identification of citizens, verify the ownership and documentation of vehicles, and, if necessary, in situations of failed identification, they will be able to accompany citizens to police stations.

On the other hand, DRs are used in situations of OP disruption and, except in emergencies, should be clearly specified in a service order. The same competent authorities that supervise and order DPs also have the authority to order DRs. The implementation of DRs is aimed at restoring normality and, where feasible, seizing illicit objects and arresting perpetrators; the procedures will vary according to the seriousness of the situation; these types of operations are used in case of supervening situations.

- Instructions: Two DOVPs-related instructions are mentioned that regulate the actions of AAs, such as the identification of persons and use of force in stop and search procedures, among other aspects. (Ministerio del Interior, 2015) (Secretaría de Estado de Seguridad, 2015).

To conclude, Notice 1/2015 is a crucial document that sets out guidelines and procedures for using special operations in VPs, with the aim of ensuring SC and legal compliance. In addition, reference is made to specific instructions regulating the actions of officers in these situations. (Ministerio del Interior, 2015).

### 3.2.- CIVIL GUARD HANDBOOK FOR SPECIAL PUBLIC ROADS OPERATIONS

The MODOVPGC is a crucial document made available to the members of the GC with the purpose of compiling all available DOVP resources for the fulfilment of their functions of prevention and maintenance of security in VPs. This handbook details good practices, procedures, materials, types of operations and specific situations that will be explored in depth below.

In terms of fundamental objectives, the handbook always takes into account the safety of both the AAs involved and the citizens, both in the fight against crime and in the SA. In addition, it focuses on strict compliance with current and applicable regulations during all operations, emphasising the basic principles of action established in the Organic Law of the Security Forces and Corps.

In relation to the use of firearms, officers are required to follow the basic principles of opportunity, congruence and proportionality, allowing them to use weapons only in situations where their life or that of others is in danger, or when there is a serious threat to the SC, always avoiding causing greater harm than that which is intended to be prevented.

Another important premise is the correct treatment of citizens during stops, including the explanation of the reasons for the operation and the necessary instructions.

In legal terms, the handbook is largely based on the legal precepts set out in the section on the legislative framework of DOVPs in this article, although special mention should be made of the LOSC, as the most relevant law.

Finally, it should be noted that only in cases where identification is not possible by other means, persons may be asked to accompany the officers to police stations, bearing in mind that the duration of these proceedings should be as short as possible, not exceeding 6 hours.

With regard to special operations, two types are distinguished according to the maximum speed of the road at the point where the operation is set up: those in VP of less than 50 km/h and those of more than 50 km/h. Both types can be preventive or reactive.

In relation to staff, it is divided into two sub-sections, on the one hand, general conditions, and on the other hand, training. In the general conditions, it is specified that the operations must be carried out by at least two agents, which can be increased according to the circumstances. Identification and transfer teams, plainclothes patrols with transmissions can also be incorporated, and a briefing should always be carried out beforehand.

Continuous training of personnel is essential, covering topics such as regulations, basic principles of action, specific functions, location of operations and use of communications, among others.

The conditions of implementation of the operations include aspects such as purpose, choice of location, duration, signalling, roles, communications, SV, operational security, recording and information processing. These aspects ensure that the operations are carried out efficiently and safely.

The installation of the operations is divided into three stages: arrival, establishment and retrieval. Each stage requires meticulous planning and specific considerations to ensure the success of the operation.

Operational deployments are composed of AAs, who will be assigned different specific roles, which provide for various individual tasks to be performed. These roles are, the head of operation, vehicle selection manager, protection for the selection manager, search manager, protection for the search manager, blockage means manager, surveillance team and pursuit team. Each plays a key role in the effective functioning of the operation. Table 1 below shows the functions of each agent according to the number of personnel available for implementation of the operation.

Table 1  
Composition and tasks of DOVPs.

Number of Officers	Officer Assignment	Purposes
Two officers	First officer	Service, selection, search and identification manager.
	Second officer	Protection for the first component.
Three officers	First officer	Head of operation, selection and identification.
	Second officer	Protection with a long weapon.
	Third officer	Manager of blockage and search means.
Four officers	First officer	Head of operation.
	Second officer	Head of vehicle selection.
	Third officer	Registration and identification and, if appropriate, blockage means.
	Fourth officer	Protection for head of selection and search officers.
More than four officers	Head of operation	Head of operation.

Source: Directorate-General of the Civil Guard (s.f.).

With regard to the materials to be used in operations that do not exceed 50 km/h, this includes elements such as signalling, channelling, barring, links, weaponry and complementary elements, all designed to guarantee the safety and efficiency of the operation. Table 2 lists all the materials described by the MODOVPGC. (Dirección General de la Guardia Civil).

Table 2  
DOVP materials.

Signage	Stop GC signal.  Signal lights, and if necessary, vehicle bridging or priority lights, yellow flashing strobe lamp and coloured cone torches (Figure 1).
Channelling	Tetrapods or similar means (Figure 2).
Barring	Set of locking spikes (Figure 3).
Links	Vehicle mobile equipment.  Mobile equipment if available.
Weaponry	Equipment.  Long weapon when more than two DOVP components.
Complementary elements	Bullet-proof waistcoats in case of availability and circumstances.  Whistle.  Reflective waistcoat.

Source: Directorate-General of the Civil Guard (s.f.).

Figure 1  
Cone lantern.



Source: Preventec (n.d.).

Figure 2  
Tetrapods.



Source: SHOKE (2023).

Figure 3  
Set of locking spikes.



Source: DENSL (2023).

The conclusion of this section is that the handbook is based on the notice and includes many similar aspects. Key aspects related to DOVPs have been highlighted, such as the organisation of personnel, implementation conditions, installation and deployments. The MODOVPGC is an essential handbook that provides detailed guidance on the planning, implementation and monitoring of special operations, with a focus on safety and regulatory compliance. This handbook is essential to ensure the success of GC operations in preventing and maintaining security in VPs.

#### 4.- ANALYSIS AND COMPARISON OF SPECIAL PUBLIC ROAD OPERATIONS OF OTHER BODIES

This section focuses on analysing and comparing the DOVP used by various police forces at the regional, national and international levels. The aim is to assess how these operations are developed in different contexts and police forces in comparison with the GC discussed in the previous section. Documents from regional, national and international bodies, such as the Mossos d'Esquadra (Catalan Police Force), the National Police Force and the French National Gendarmerie, will be considered for this comparison.

##### 4.1- MOSSOS D'ESQUADRA

The roots of the Mossos d'Esquadra (hereafter ME) go back to the 18th century, taking its current form in 1983. (GENCAT, 2011) The Mossos d'Esquadra has various competencies including SC, administrative police, judicial police, and traffic control. As for DOVPs related to maximum speeds up to 50 km/h, they are governed by a similar legal framework to the one previously studied, based on the LOSC. (GENCAT, 2011).

The objectives of the ME DOVPs fall into four categories: Level 1 traffic control, LOSC enforcement, preventive measures to increase the sense of security, and reactive SC and crime control operations.

To establish a DOVP, guidelines are followed that include the selection of safe and efficient locations, ensuring the safety of citizens and officers, appropriate signage, balancing efficiency and traffic flow, clear instructions, support from other patrols and the use of materials such as traffic signs, cones, torches, reflective waistcoats, portable communications, report cards and long weapons depending on the nature of the operation.

DOVPs are divided into two types: On the one hand, the police roadblocks, which allow for the identification and search of persons and vehicles, and on the other hand, the static points, where at least one member of the team will be outside the police vehicle in a visible and strategic location. These static points serve a variety of objectives, such as traffic control, public entertainment surveillance and crime prevention. (MOSSOS D'ESQUADRA, 2022).

##### 4.2.- NATIONAL POLICE FORCE

Throughout its history, the National Police Force (hereinafter CNP) has been given different names, until the current police force was established through LO 2/86 of the State Security Forces and Corps. The CNP has competencies in Police Operations, SC, and crime investigation, among other areas. (POLICÍA NACIONAL, s.f.).

In relation to DOVPs, the CNP divides its handbook into several sections, including the purpose, the legal framework, general considerations for the establishment of Static Control Devices (hereinafter DEC), types of controls, other types of controls, procedures for establishing and removing a DEC, and relevant aspects.

The legal framework of CNP's DOVPs is based on the LO 2/86 of the State Security Forces and Corps and the LOSC. The main objective of DOVPs is the

recognition of persons and vehicles for both preventive or deterrent and offensive or reactive purposes.

General considerations for establishing a DEC include principles such as clear instructions, adequate means and signage, safety of persons and officers, surprise factor, and regulation of the use of firearms.

The CNP establishes two types of VPs: interurban roads and urban roads. DOVPs on interurban roads are called DEC, while DOVPs on urban roads include traffic light controls and filters.

In terms of DOVPs on urban roads, traffic light controls are based on the use of a plainclothes team located at red lights, which selects vehicles, and another team located some 200 metres after the lights, whose function is focused on stopping the previously selected vehicles. While filters focus on the detection of persons and vehicles of police interest and are set up at strategic locations.

The procedures for establishing and removing a DEC involve cutting off traffic and removing the means employed. These procedures must follow the safety guidelines set out in the Health and Safety handbook.

In terms of relevant aspects, the importance of acting both preventively and reactively, the possibility of close and distant closures, the prioritisation of safety and effectiveness, and the delimitation of the DOVP into three zones: surveillance and security, search and blockage, and reaction-pursuit.

The handbook also mentions mobile apps that report DOVPs, such as Telegram<sup>1</sup> and Social Drive<sup>2</sup>, stressing the need for officers to be aware of these to avoid interference with the surprise factor. In addition, the CNP collaborates and coordinates with the Local Police in several of its operations in urban VPs, as in some urban centres the latter have competence in traffic matters. (ESCUELA NACIONAL DE POLICÍA, 2022).

#### 4.3- FRENCH NATIONAL GENDARMERIE

The French National Gendarmerie (hereafter GNF), founded in 1791, combines military and police functions. Its main branches are the Ministry of Defence and the Ministry of the Interior. The GNF carries out both civilian and military missions, including judicial police, administrative police, relief and rescue, as well as SC, intelligence, and counter-terrorism missions. (Ministère de l'Intérieur et des Outre-mer, s.f.) (RÉPUBLIQUE FRANÇAISE, s.f.).

---

<sup>1</sup> Telegram is a messaging application based on the protection of privacy, allowing as main functions: displaying user names instead of telephone numbers and the creation of message groups, in which the sending of messages is allowed (TELEGRAM, s.f.).

<sup>2</sup> Social Drive, as stated in the CNP Handbook, is an application that sent notifications to drivers, warning them about DOVPs, among other alerts. These alerts are communicated by users of the VPs themselves. (ESCUELA NACIONAL DE POLICÍA, 2022).



As for DOVPs, the GNF has a notice that sets out its guidelines. The main missions of DOVPs include the fight against road insecurity and flow control and escorts, with an emphasis on the prevention and observation of criminal behaviour on the road.

The GNF is organised in various distributions, such as Road Platoons, Motorised Platoons, Motorised Brigades and Rapid Intervention Brigades, each with specific missions related to flow control and SV.

Service design aims to quantify effects and ensure efficiency, maximising the use of available resources and staff training. Resources include speed enforcement operations, motorbikes, rapid response vehicles and road safety education tracks.

The command role is divided between the departmental Gendarmerie group commander, the departmental SV squad commander and the platoon or brigade commanders. Each has specific functions related to the design, organisation and training of staff.

The provisions for staff underline the importance of training, exemplary attire and courteous and non-discriminatory behaviour due to the constant contact with citizens.

The circular also includes appendices with examples of DOVP use according to factors such as space-time, threats, lines of action and support to the acting force. Annex II of the notice lists the main services that are usually demanded and performed, such as identifications and speed checks.

#### 4.4.- COMPARISONS WITH THE CIVIL GUARD

This last sub-section is completed by a comprehensive comparison between the MODOVPGC and the previously analysed police documents. This assessment will focus on highlighting obvious differences between the above-mentioned documents discussed in this section and the MODOVPGC, without losing sight of the similarities that may exist, in order to provide a detailed understanding of the main differences between them.

Main differences in the comparison between the ME and GC:

1. Types of DOVPs: The ME document sets out two types of DOVPs with a speed limit of 50 km/h: police roadblocks and static points. In contrast, the MODOVPGC does not provide for any specific type of DOVP for this speed limit.
2. Tasks of the components: The ME document does not assign specific tasks to each component that makes up the DOVP, while the MODOVPGC does assign tasks to each component.
3. Objectives: The ME document specifically states the sanctioning purpose, focusing on helmet and seat belt enforcement, while the MODOVPGC focuses on preventive and reactive purposes without a specific emphasis on sanctions.
4. Assembly and disassembly procedure: The ME document does not detail a specific procedure to be followed for the assembly and disassembly of DOVPs, whereas the MODOVPGC does establish an order for these processes.

Key differences in the comparison between CNP and GC:

1. Types of DOVPs: The CNP handbook sets out two types of DOVPs at a speed limit of 50 km/h: filters and traffic light controls. The MODOVPGC does not establish any specific type of DOVP for this speed limit.
2. Importance of mobile applications: The CNP handbook mentions the importance of mobile applications such as Telegram and Social Drive, which notify citizens about DOVPs. The MODOVPGC does not address the relevance of new technologies in this context.
3. Graphic example: The CNP handbook includes a graphic example of a filter-type DOVP, while the MODOVPGC does not provide any example for DOVPs below 50 km/h.
4. Materials used: The CNP handbook does not describe the materials to be used in DOVPs, focusing more on the structure of the operation. Instead, the MODOVPGC sets out a detailed list of the materials needed for set up.
5. Competence in traffic matters: The CNP does not have the power to deal with traffic matters and needs the support of the Local Police for these functions, while the GC has this power.
6. Stages to set up DOVPs: The CNP handbook establishes two stages to set up DOVPs: assembly and disassembly. In the MODOVPGC, there are three stages: arrival, establishment and retrieval.

Main differences when comparing GNF and GC:

1. Distribution of units: The GNF notice details the distribution of units with DOVP competencies and the figures commanding them, whereas these factors are not addressed in the MODOVPGC.
2. Related materials: The GNF notice lists the materials related to the purpose of the DOVP, while the MODOVPGC lists the materials necessary for setting it up.
3. Main objective: The GNF notice focuses on SV as the main objective, while the MODOVPGC focuses on SC and OP, establishing preventive or reactive DOVPs.
4. Examples of DOVPs: The GNF notice provides examples of different types of DOVPs depending on the specific factors, whereas the MODOVPGC does not provide any examples.

Within the framework of the comparison between the GC and the procedures adopted by other police forces with regard to DOVPs, notable differences have been identified, the most obvious being: the differentiation by ME and NPC of DOVPs into two types according to their purpose, the presentation by NPCs of the importance of the use of mobile applications by citizens in order to avoid DOVPs, and finally, the absence of graphic examples of DOVPs in the MODOVPGC.

## **5.- CONCLUSIONS AND POSSIBLE UPDATES IN THE FIELD OF CIVIL GUARD SPECIAL PUBLIC ROAD OPERATIONS**

In this last section of the article, after exploring the legislative framework of DOVPs in Spain, an in-depth analysis of the MODOVPGC and a comparison with other police forces, the study will be brought to a close.

First, the conclusions reached are presented, taking into account the partial conclusions reached at each stage of the study. Subsequently, possible updates and improvements to the MODOVPGC in various aspects will be proposed based on the findings and benchmarking.

## 5.1.- CONCLUSIONS

From the above analyses, important conclusions can be drawn that allow us to assess the way in which the GC DOVPs are set up.

From a legal point of view, the current regulations, especially the MODOVPGC, provide a solid basis for the implementation of DOVPs. This therefore suggests that, from a legal point of view, the DOVPs are well supported and do not require immediate updates.

However, with regard to the operational and technological development of DOVPs with a maximum speed of 50 km/h, there is a lack of detail in the MODOVPGC, given that, although it offers a solid guide with its respective graphic examples for operations with speed limits above 50 km/h, it lacks graphic examples and specific guidelines for lower speed DOVPs, which are the focus of this study. This shortcoming is evident when comparing the MODOVPGC with other police forces, such as the ME, CNP and the GNF, which show a greater degree of development and detail in this area.

Therefore, it can be concluded that current DOVPs with speed limit up to 50 km/h of the GC need to be upgraded in operational terms to improve their effectiveness and safety.

## 5.2.- PROPOSALS FOR FUTURE UPDATES

In order to improve the DOVPs for speeds of up to 50 km/h in the GC, several proposals have been made covering the technological and operational upgrading of these operations.

In terms of technology, the proposals are for improvements in materials, applications and modernisation of controls.

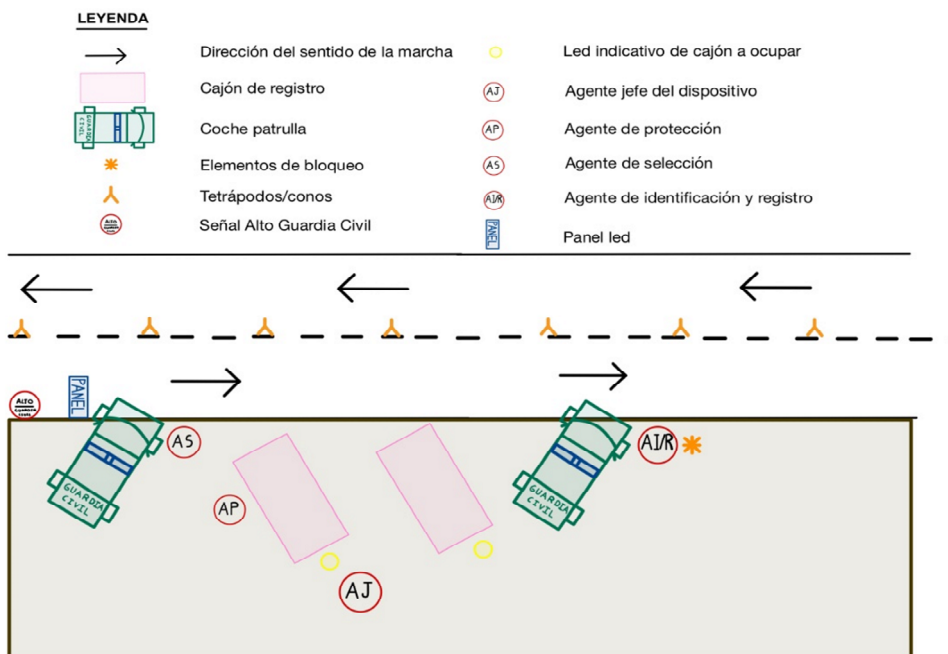
The materials suggest the inclusion of elements such as rotating emergency lights to improve night-time visibility of DOVPs and increase safety for both officers and drivers, and the incorporation of LED reflective waistcoats and LED tetrapods or cones to improve the overall visibility of the operation and its officers. It is also proposed that tablets be purchased in bulk and included in the handbook as a technological tool to streamline procedures and promote greater efficiency.

Among materials and applications, Optical Character Recognition devices, also known as OCR, should be highlighted. These devices are already being used by some police forces, such as the Madrid Municipal Police. The proposal would involve the implementation of this system in both vehicles and tablets. This would allow the police vehicle's device or tablet camera to focus on the vehicle approaching the DOVP and, if the vehicle or its owner had any markings, the system would immediately generate an alert to notify the responding officers.

In the area of applications, it is deemed appropriate to include a reference in the MODOVPGC to the functioning of applications such as Waze<sup>3</sup>, Social Drive and Telegram, with the aim of raising awareness among agents of their impact on the effectiveness and the surprise factor of DOVPs.

With regard to the modernisation of DOVPs, two proposals are put forward. The first is the automation of DOVP assembly and disassembly process, prioritising the safety of agents by preventing them from performing these tasks manually and on the roadway itself. This could be achieved by equipping the devices involved with small motors and batteries that allow them a small amount of mobility, as well as a system for remotely controlling their movement. The second proposal is the creation of semi-automated DOVPs, through the implementation of programmable LED panels on GC vehicles or on stands at the start of DOVPs, indicating specific actions to drivers. In addition to the LED panel, LED lights will be implemented in the identification and search area. The LED panels will then be able to direct the parking of the selected vehicle next to the previously switched on LED light in the identification and search area. These proposals are intended to improve the safety and effectiveness of operations, as the AAs would no longer be on the carriageway or road, but in the immediate vicinity of the road. On the other hand, it is recognised that its implementation could require significant initial investment and a change in working procedures, as it would require the creation of a new working ecosystem. An example of what a typical DOVP in the second modernisation proposal could look like can be seen in Figure 4.

Figure 4  
Modern DOVP scheme.



Source: Created by the author.

<sup>3</sup> Waze is a mobile application that allows users to plan their journeys, calculating the best route by analysing the information provided by other road users. This information can be very diverse, such as traffic, vehicles stopped on the road, radars, police operations, etc. (WAZE, s.f.).

In summary, these proposals seek to modernise and improve the GC's DOVPs in both technological and operational terms, with the aim of increasing the efficiency of these operations in VP and the safety of AU and citizens.

On the other hand, several proposals for operational improvements have been identified for DOVP speeds up to 50 km/h in the GC. These proposals focus on the optimisation of procedures and the diversification of DOVPs according to their purpose and the situation on the field.

One of the proposals is to set a maximum time limit for DOVPs to identify individuals, as the impact of mobile applications on the surprise factor of operations is considered to be of great importance. We suggest, for example, a maximum duration of 15 minutes from setting up or 5 minutes from AAs noticing that the DOVP is already advertised on mobile applications.

The following proposal aims to standardise the procedures and instructions for DOVPs throughout the national territory under the jurisdiction of the GC, thereby eliminating current regional differences.

Furthermore, it is proposed to create different types of DOVPs depending on their objective:

- Identification DOVP: for the identification and search of persons and vehicles for the purpose of preventing and responding to unlawful offences.
- Presence DOVP: aimed at increasing subjective security<sup>4</sup> with visible patrol presence in VPs.
- Contingency DOVP: intended to establish perimeters and to delimit areas in cases of serious disturbances of the OP.
- Safety elements DOVP: aimed at verifying the use of safety elements by VP users and the vehicles condition.

In addition, depending on the field situation (caption of Figure 5), we propose to create different graphic DOVP models:

- On two-lane VPs with the same driving direction (Figure 6).
- On two-lane VPs with two different driving directions (Figure 7).
- At roundabouts on two-lane VPs (Figure 8).
- At intersections with stop signs (Figure 9).
- At traffic lights (Figure 10).
















These graphic models would include simple visual representations to facilitate agents' understanding and be supported by a symbol caption.

---

<sup>4</sup> Subjective security can be defined as follows: "a legal asset protected from the crime of threats, which consists of enjoying one's own feeling of tranquillity and peace of mind". (Diccionario de la Lengua Española, s.f.).

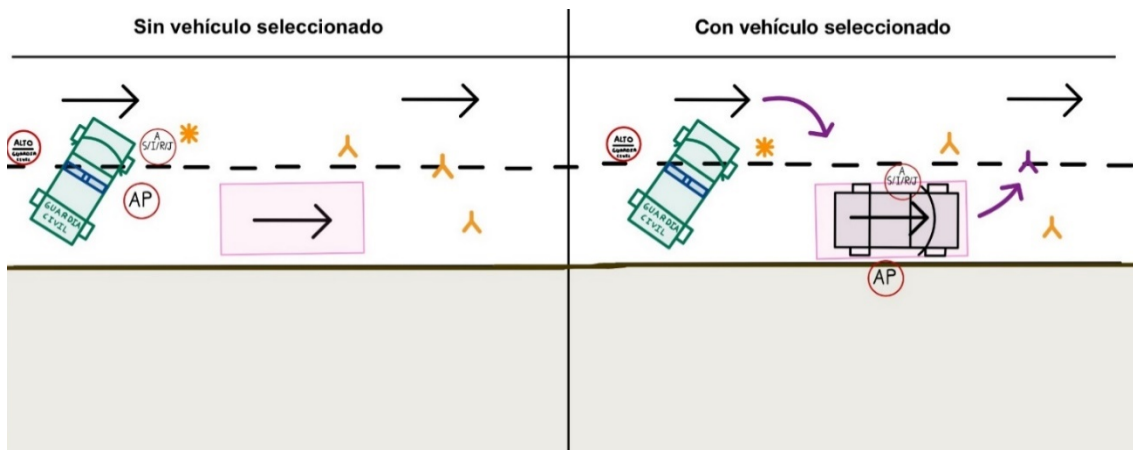
Figure 5  
Symbol caption

**LEYENDA**

	Dirección del sentido de la marcha		Agente de selección, identificación, registro y jefe del dispositivo
	Cajón de registro		Agente jefe del dispositivo
	Coche patrulla		Agente de protección
	Elementos de bloqueo		Agente de selección
	Tetrápodos/conos		Agente de identificación y registro
	Señal Alto Guardia Civil		Coche ciudadano
	Tetrápodos/conos móviles		Trayectoria a seguir por el vehículo seleccionado
	Semáforo		

Source: Created by the author.

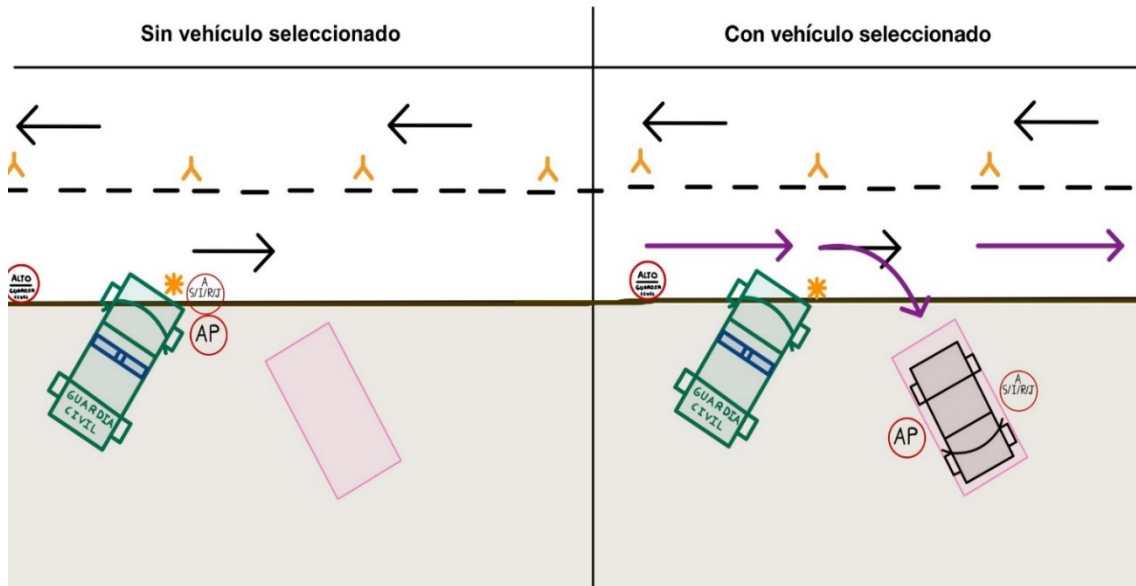
Figure 6  
Scheme of DOVPs on two-lane VPs with the same driving direction.



Source: Created by the author.

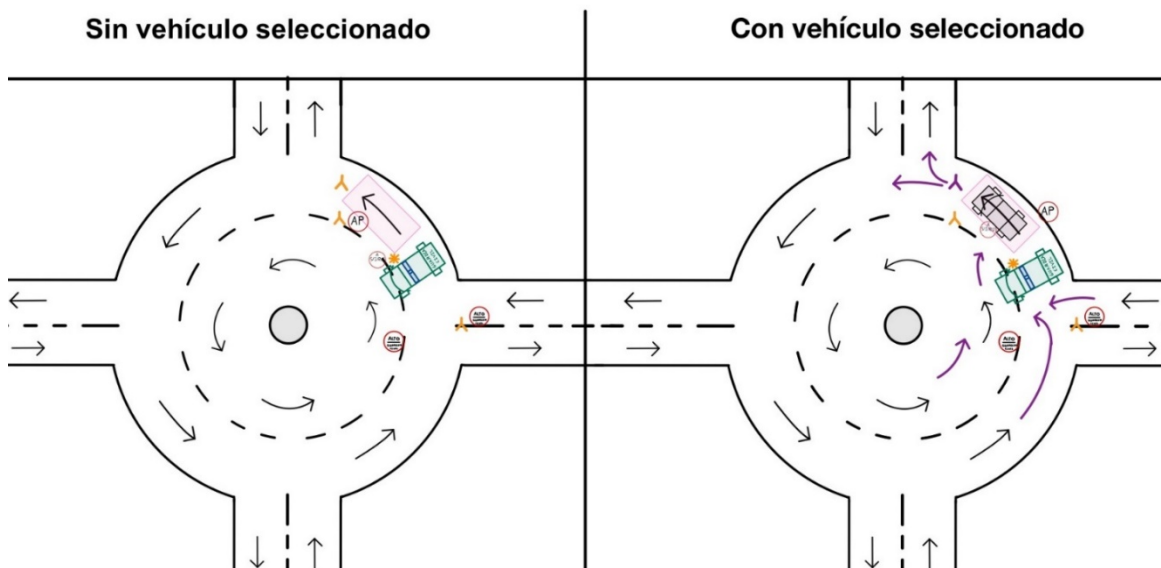


Figure 7  
 Scheme of DOVPs on two-lane VPs with two different driving directions.



Source: Created by the author.

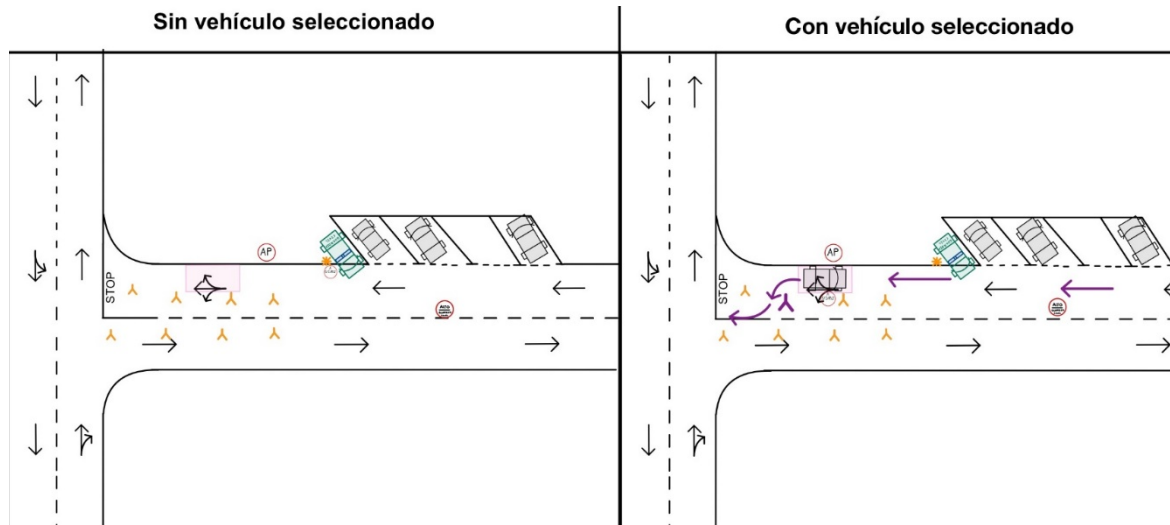
Figure 8  
 Scheme of DOVPs at roundabouts on two-lane VPs.



Source: Created by the author.

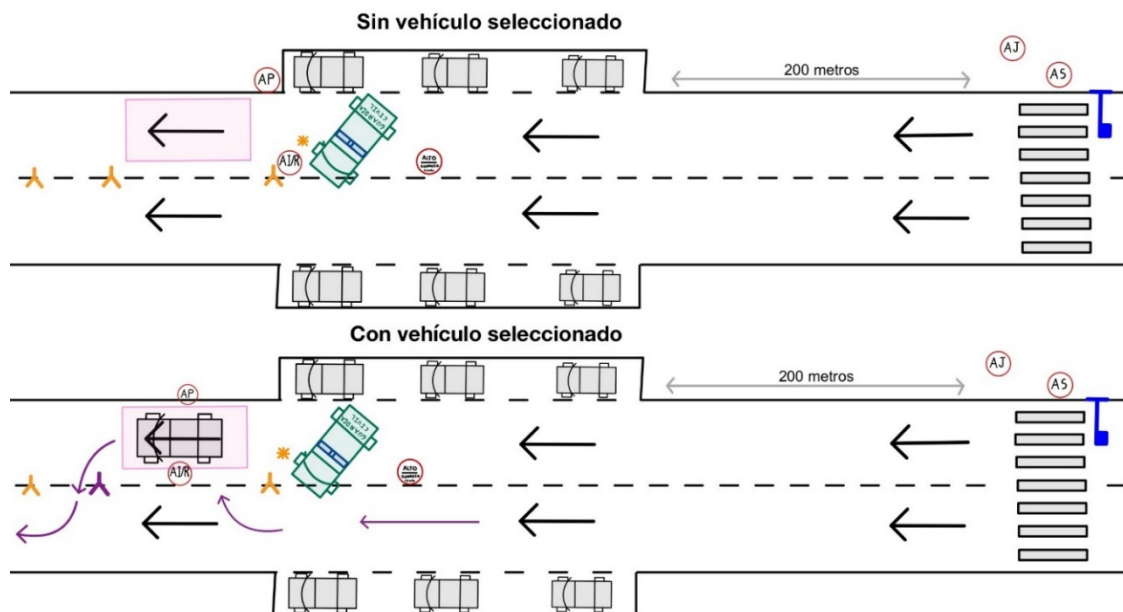


Figure 9  
Scheme of DOVPs at stop signs.



Source: Created by the author

Figure 10  
Scheme of DOVPs at traffic lights.



Source: Created by the author.

To conclude, I would like to highlight a proposal made by the GC Officers' Academy in its handbook of indications. This proposal involves the implementation of bait operations, which consist of setting up two successive operations, the first of which is smaller and visible, so that users can bypass it, and the second of which is larger and will be targeted at those who have bypassed the first operation (Navarro, 2021).

These proposals seek to improve and upgrade the efficiency and effectiveness of the GC's DOVPs by providing clear guidelines adapted to different situations, while ensuring the safety and lawfulness of these operations on the VPs.

This article has comprehensively analysed the DOVPs for speeds below 50 km/h, covering the legal framework, their implementation and comparison both in the GC and in other regional, national and international bodies, concluding with the proposal of various improvements in technology and operability.

## 6. BIBLIOGRAPHY

- Congreso de los Diputados. (n.d.). *app.congreso*. Retrieved febrero 07, 2023, from <https://app.congreso.es/consti/constitucion/indice/titulos/articulos.jsp?ini=104&tipo=2#:~:text=Art%C3%ADculo%20104,y%20garantizar%20la%20seguridad%20ciudadana>.
- DENSL. (n.d.). *DENSL BALIZAMIENTO Y SEGURIDAD*. Retrieved marzo 08, 2023, from <https://densl.com/productos/control-policial/conos-policiales/conotrapodo/>
- Diccionario de la Lengua Española. (n.d.). *RAE*. Retrieved febrero 20, 2023, from <https://dpej.rae.es/lema/seguridad-subjetiva#:~:text=Pen.,propio%20de%20tranquilidad%20y%20sosiego>.
- Dirección General de la Guardia Civil. (n.d.). *MANUAL OPERATIVO DISPOSITIVOS OPERATIVOS EN LAS VÍAS PÚBLICAS*. MINISTERIO DEL INTERIOR. Retrieved febrero 14, 2023
- ESCUELA NACIONAL DE POLICÍA. (2022). *DISPOSITIVOS ESTÁTICOS DE CONTROL*. Retrieved febrero 22, 2023
- GENCAT. (2011, octubre 27). Retrieved febrero 21, 2023, from [https://mossos.gencat.cat/es/els\\_mossos\\_desquadra/organitzacio/funcions/#:~:text=Seguridad%20ciudadana%20y%20orden%20p%C3%ABlico,Resoluci%C3%B3n%20amistosa%20de%20conflictos%20privados](https://mossos.gencat.cat/es/els_mossos_desquadra/organitzacio/funcions/#:~:text=Seguridad%20ciudadana%20y%20orden%20p%C3%ABlico,Resoluci%C3%B3n%20amistosa%20de%20conflictos%20privados)
- GENCAT. (2011, octubre 27). *mossos.gencat.cat*. Retrieved febrero 20, 2023, from [https://mossos.gencat.cat/es/els\\_mossos\\_desquadra/historia\\_de\\_la\\_pg-me/](https://mossos.gencat.cat/es/els_mossos_desquadra/historia_de_la_pg-me/)
- Guardia Civil. (n.d.). *Seguridad Vial*. Retrieved enero 30, 2023, from [https://www.guardiacivil.es/es/institucional/Conocenos/especialidades/Seguridad\\_Vial/index.html](https://www.guardiacivil.es/es/institucional/Conocenos/especialidades/Seguridad_Vial/index.html)
- Jefatura de Estado. (1986, marzo 14). *Agencia Estatal Boletín Oficial del Estado*. Retrieved febrero 01, 2023, from <https://www.boe.es/buscar/act.php?id=BOE-A-1986-6859&p=20150729&tn=1>
- Jefatura de Estado. (2007, octubre 23). *Agencia Estatal Boletín Oficial del Estado*. Retrieved febrero 04, 2023, from <https://www.boe.es/buscar/act.php?id=BOE-A-2007-18391>
- Jefatura de Estado. (2015, enero 8). *Agencia Estatal Boletín Oficial del Estado*. Retrieved febrero 02, 2023, from <https://www.boe.es/buscar/act.php?id=BOE-A-2015-3442>
- Jefatura del Estado. (2018, diciembre 06). *Agencia Estatal Boletín Oficial del Estado*. Retrieved enero 14, 2023, from <https://www.boe.es/buscar/doc.php?id=BOE-A-2018-16673>

- Ministère de l'Intérieur et des Outre-mer. (n.d.). *Germanderie Nationale*. Retrieved febrero 23, 2023, from Ministère de l'Intérieur et des Outre-mer
- Ministerio del Interior. (2015, octubre 31). *Agencia Estatal Boletín Oficial del Estado*. Retrieved enero 09, 2023, from <https://www.boe.es/buscar/act.php?id=BOE-A-2015-11722>
- Ministerio del Interior. (2015). *Circular 1/2015 Dispositivos Operativos en la Vías Públicas*. Ministerio del Interior. Retrieved enero 3, 2023
- MOSSOS D'ESQUADRA. (2022). *OPERATIVAS*. Retrieved febrero 20, 2023
- Navarro, M. C. (2021). *Actuación Policial con Vehículos*. Aranjuez: Departamento de instrucción y Adiestramiento de la Academia de Oficiales de la Guardia Civil de Aranjuez. Retrieved marzo 15, 2023
- POLICÍA NACIONAL. (n.d.). *Portal Web de la Policía Nacional*. Retrieved febrero 21, 2023, from [https://www.policia.es/\\_es/tupolicia\\_conocenos\\_timeline.php](https://www.policia.es/_es/tupolicia_conocenos_timeline.php)
- PREVENTEC. (n.d.). *PREVENTECSL*. Retrieved marzo 15, 2023, from <https://preventecsl.es/senalizacion/materiales-de-senalizacion/balizas-luminosas-de-senalizacion/kit-linterna-con-cono-de-senalizacion/>
- RÉPUBLIQUE FRANÇAISE. (n.d.). *République Française Legifrance*. Retrieved febrero 23, 2023, from <https://www.legifrance.gouv.fr/codes/id/LEGIARTI000020957186/2009-08-07>
- Secretaria de Estado de Segurida. (2007). *Defensor del pueblo*. Retrieved enero 11, 2023, from [https://www.defensordelpueblo.es/wp-content/uploads/2016/03/Instruccion\\_12\\_2007.pdf](https://www.defensordelpueblo.es/wp-content/uploads/2016/03/Instruccion_12_2007.pdf)
- Secretaría de Estado de Seguridad. (2015). *Manual policial*. Retrieved enero 15, 2023, from <https://www.manualpolicial.es/Descargas/Legislacion/4Leg/5SC/instruccion-7-2015.pdf>
- SHOKE. (n.d.). *SHOKE DEFENSA Y SEGURIDAD*. Retrieved marzo 09, 2023, from <https://www.tiendashoke.es/protecciones-antidisturbios/shoke-barrera-pinchos>
- TELEGRAM. (n.d.). *Telegram*. Retrieved abril 04, 2023, from <https://web.telegram.org/k/>
- WAZE. (n.d.). *WAZE*. Retrieved marzo 21, 2023, from <https://www.waze.com/es/waze>



**Ricardo Serrano de Andrés**  
Cadet of Guardia Civil  
Degree on Security Engineering from  
the Carlos III University of Madrid

**THE FUTURE IN THE INVESTIGATION AND  
RECONSTRUCTION OF ROAD ACCIDENTS.  
THE E.D.R. (EVENT DATA RECORDER)  
DEVICE AND ITS APPLICATION TO HELP  
REDUCE ACCIDENTS**



## THE FUTURE IN THE INVESTIGATION AND RECONSTRUCTION OF ROAD ACCIDENTS. THE E.D.R. (EVENT DATA RECORDER) DEVICE AND ITS APPLICATION TO HELP REDUCE ACCIDENTS.

**Summary:** 1.- COMPREHENSIVE APPROACH TO ROAD TRANSPORT. 2.- REGULATORY FRAMEWORK FOR DATA RECORDING DEVICES. 2.1.- European level. 2.2.- United States. 2.3.- Other countries. 3.- EVENT DATA RECORDER DEVICE (EDR). 3.1.- Description. 3.2.- Data recorded by the EDR. 3.3.- Reading of recorded data. 3.4.- Interpretation of the data. 3.5.- Usefulness of the data obtained. 3.6.- Limitations. 3.7.- Importance of physical evidence. 4.- APPLICATION OF THE SHELL MODEL TO THE INVESTIGATION AND RECONSTRUCTION OF ROAD ACCIDENTS. 4.1.- Bringing the SHELL model to road transport. 5.- CONCLUSIONS AND FUTURE LINES OF ACTION. 6. BIBLIOGRAPHY.

**Resumen:** La reciente entrada en vigor del Reglamento (UE) 2019/2144 del Parlamento Europeo y del Consejo, de 27 de noviembre de 2019, estableció que desde julio de 2022 los vehículos de nueva homologación tipo, tienen que llevar incorporado un dispositivo registrador de datos (Event Data Recorder, EDR).

El artículo que a continuación se expone trata de conocer si este nuevo sistema va a ayudar a aminorar los tiempos de investigación y a facilitar las labores de reconstrucción de los siniestros viales a los agentes de la Agrupación de Tráfico de la Guardia Civil, encargados de estas tareas en lo que respecta a las vías interurbanas. Asimismo, se estudia si este nuevo sistema contribuirá a reducir considerablemente el número de siniestros y lesiones en el transporte por carretera.

Por último, se ha realizado una aproximación de como el modelo SHELL, utilizado por los investigadores de accidentes aéreos, pudiera ser implementado también en la investigación y reconstrucción de siniestros viales, teniendo en cuenta que el transporte aéreo, desde sus orígenes, ha sido el medio de transporte más seguro de la historia y el que desde un principio ha apostado por el concepto de seguridad integral.

**Abstract:** The recent implementation of EU Regulation 2019/2144 of the European Parliament and the Council on November 27, 2019, established that as of July 2022, newly homologated vehicle types must be equipped with an Event Data Recorder (EDR).

The following article aims to investigate whether this new system will help expedite accident investigation times and facilitate accident reconstruction tasks for officers of the Traffic Group of the Civil Guard, responsible for these activities on interurban roads. Additionally, it assesses whether this new system will significantly reduce the number of accidents and injuries in road transportation.

Finally, an exploration is conducted on how the SHELL model, traditionally used by aviation accident investigators, could also be applied to accident investigation and reconstruction in road accidents, taking into consideration that air transport has been the safest way of travelling in history and has been developed considering an integral approach.

**Palabras clave:** Siniestro vial, Registrador de datos de eventos, evidencia, seguridad vial, tráfico.

**Key Words:** Traffic accident, Event Data Recorder (EDR), evidence, road safety, traffic.



**GLOSSARY OF ACRONYMS**

AAA	American Automobile Association
ABS	Anti-lock Braking System
ACM	Airbag Control Module
ADAS	Advanced Driver Assistance Systems
ATGC	Civil Guard Traffic Unit
CDR	Crash Data Retrieval
CFR	Code of Federal Regulations
CIAF	Commission for the Investigation of Railway Accidents
CIAIAC	Civil Aviation Accident and Incident Investigation Commission
CIAIM	Permanent Commission for the Investigation of Maritime Accidents and Incidents
CVR	Cabin Voice Recorder
DGT	Directorate-General for Traffic
DIRAT	Traffic Accident Investigation and Reconstruction Department
DLC	Diagnostic Link Connector
ECU	Engine Control Unit
EDR	Event Data Recorder
ERAT	Road Traffic Accident Reconstruction Teams
FDR	Flight Data Recorder
ICAO	International Civil Aviation Organization
MITMA	Ministry of Transport, Mobility and the Urban Agenda
MOSES	Model of Sequential Events of an Incident
NHTSA	National Highway Traffic Safety Administration
OBD	On Board Diagnostics
EU	European Union

## 1.- COMPREHENSIVE APPROACH TO ROAD TRANSPORT

The need for human beings to move has existed since ancient times, as the first inhabitants of the Earth moved to meet their essential needs, such as the search for food or shelter. Throughout history, these needs have diversified and expanded, requiring longer and longer journeys.

Mobility, as highlighted in the explanatory statement of the future Sustainable Mobility Act, plays a crucial role in the lives of citizens. People move for specific purposes, such as going to work or enjoying leisure activities, vital aspects that influence their well-being and quality of life. It is therefore the responsibility of public authorities to guarantee such movement, considering it not only as a means, but as a right in itself. Furthermore, this movement must be safe, which means that it must be "*free from danger, damage or risk*" (RAE, 2023), regardless of the means of transport used.

The concept of safety has not had the same relevance in the development of policies in the different modes of transport, a fact that has been and is reflected very directly not only in the number of fatalities and serious injuries recorded in each mode of transport, but also in the administrative framework of each of them.

By way of summary, it can be said that rail, maritime and air transport all have a specific Accident Investigation Commission, a collegiate body attached to the Ministry of Transport, Mobility and Urban Agenda (MITMA), while road transport does not. In addition, the government has recently approved the Bill creating the Independent Technical Investigation Authority for Rail, Maritime and Civil Aviation Accidents and Incidents, a new authority charged with explaining the causes of accidents and providing safety recommendations to prevent recurrence. This new authority excludes road accidents involving road transport vehicles.

All three modes of transport (air, sea and rail) have a State Safety Agency specialised in each of the three modes of transport.

In the case of road transport the situation is totally different, since each of the elements (infrastructure, vehicles, human factor) that make up this type of transport are located in different administrative organisations and ministries. The certification of vehicles is the responsibility of the Ministry of Industry; the infrastructure is the responsibility of the MITMA, the regional governments, the autonomous communities and the municipalities; and the supervision and regulation is the responsibility of the Ministry of the Interior, which delegates it to the Directorate-General for Traffic (DGT) and to the Guardia Civil Traffic Unit (ATGC) for interurban roads (except in the autonomous communities with delegated powers).

With regard to the accident rate, the data published by the Permanent Commission for the Investigation of Maritime Accidents and Incidents (CIAIM) in its annual report in 2021 "received 283 notifications of maritime accidents and incidents [...] in which a total of 9 deaths, 2 missing people and 14 seriously injured were recorded". In the case of air transport, the Civil Aviation Accident and Incident Investigation Commission (CIAIAC) recorded 42 aircraft accidents involving 5 fatalities and 9 serious injuries. In addition, there were 28 accidents involving ultralight aircraft with 4 fatalities and 5 serious injuries. It should be noted that none of the five aircraft fatalities involved commercial flights.

According to the Annual Report of the State Railway Safety Agency, in 2021, there were 52 accidents in which 15 people died and 19 were seriously injured. The 15 fatalities were caused by run-over or level crossing accidents.

In road transport, the data collected in the DGT's Accident Statistics Yearbook show that in 2021, 89,862 road accidents with casualties were recorded in which 1,533 people died and other 4,142 were seriously injured.

The official data presented for the different modes of transport show that the approach to safety has not been uniform across all modes. Road transport stands out as the only mode where policies at supranational and national level have not addressed all the components that make up the road transport system in an integrated manner. In their early stages, vehicles evolved without taking into account factors such as road infrastructure or occupant safety. Roads were designed without considering the possibility of human error in driving, and drivers got behind the wheel of vehicles that were not designed to mitigate human error, which, when it occurred, often resulted in death or serious injury.

The Safe System approach is included in the Road Safety Strategy 2030, drawn up by the DGT, which is the roadmap to be followed to achieve the objective of reducing road accidents.

Within the Road Safety Strategy, one of the nine component areas is safe and connected vehicles. Based on the Safe System approach, the automotive industry has understood that vehicle safety requires the introduction of new technological systems to aid driving. The European Union (EU), aware of the importance of vehicles in reducing road accidents, has been making a series of Advanced Driver Assistance Systems (ADAS) mandatory in vehicles marketed in Europe to help mitigate human error in the event of accidents.

One of the devices that will contribute to the analysis of the causes of accidents is the EDR, a system similar to a black box that is installed in vehicles and records variables that will enrich and refine traffic accident investigations. In addition, they will allow a deeper understanding of injury limits, leading to improved passive safety measures. This device will also become an essential tool for dealing with legal aspects in accident reconstruction and for the implementation of other services aimed at improving road safety.

This safety device, whose implementation in vehicles has been significantly delayed, has proven in other modes of transportation to be an essential component for accident investigation and, more importantly, for raising the safety standards of vehicles available on the market.

## **2.- REGULATORY FRAMEWORK FOR DATA RECORDING DEVICES**

Over the last decades, there has been a significant transformation in the technological systems installed in vehicles. ADAS have been developed with the primary purpose of preventing or reducing potential driver errors by anticipating dangerous situations and taking appropriate action. Taken together, these developments contribute significantly to the reduction of accidents, injuries and casualties.

This section shows the current regulations related to the different electronic event recording devices integrated in vehicles, as well as the way of recording and extracting data for a proper analysis and reconstruction of road accidents.

## 2.1.- EUROPEAN LEVEL

Although Europe is the safest continent for road transport, provisional figures for the year 2022 estimate that approximately 20,600 people lost their lives and more than 100,000 were seriously injured. These numbers are notoriously high and require decisive action to reduce them. In the fight to reduce these figures, EU member states are taking a significant step forward by setting an ambitious Vision Zero target (approaching zero deaths and zero injuries in road transport).

A review of all published European legislation on the type-approval of parts and vehicles shows the EU's constant concern over the past decades to ensure that vehicles manufactured and placed on the market are safe.

The European Parliament Resolution of 18 May 2017 already called on the Commission to revise Regulation 661/2009 on type-approval requirements for the general safety of vehicles without delay. This is where emergency data recorders appear in a very brief way, as an example of the importance of technological advances in helping significantly in the investigation of road crashes.

Furthermore, in the framework of the EU Road Safety Policy for 2021-2030, the European Parliament Resolution of 6 October 2021, measure 50, calls on the Commission to specifically define a set of rules for the recording and retrieval of internal vehicle data solely for the purpose of accident investigation to improve road safety.

Of particular note is Regulation (EU) 2019/2144 of the European Parliament and of the Council of 27 November 2019 on type-approval requirements for motor vehicles and their trailers, and for systems, components and separate technical units intended for such vehicles, with regard to their general safety and the protection of vehicle occupants and vulnerable road users. This Regulation lays down a number of technical requirements to be integrated into new vehicles in order to ensure a high level of safety. It forms the theoretical basis for the introduction of event recording devices, which are known as EDRs.

The regulation in question defines EDR as "a system designed exclusively to record and store critical crash-related parameters and information shortly before, during and immediately after a crash". (Regulation (EU) 2019/2144).

The reason for integrating data loggers into new vehicles is to obtain accurate information in the immediate aftermath of an accident. In this way, relevant data is obtained which can be included in the corresponding reports and even for the preparation of the reconstruction of the incident. This Regulation establishes both the requirements and the dates from which the EDR must be compulsorily implemented in new vehicles, which depend on the category of vehicle. Therefore, in accordance with the provisions of Regulation 2019/2144 of the European Parliament, the aim is to equip all newly type-approved vehicles in the European vehicle fleet with different driving assistance systems.

						
Denominación	M1	M2	M3	N1	N2	N3
Registrador de datos de incidencias (EDR)						
Sistema de advertencia de somnolencia y pérdida de atención del conductor (DDR-DAD)						
Interfaz para la instalación de alcoholímetros de arranque (ALC)						
Señal de frenado de emergencia (ESS)						
Asistente de velocidad inteligente (ISA)						
Sistema avanzado de frenado de emergencia (AEB-VEH)						
Sistema de mantenimiento de carril (LKA)						
Detector de marcha atrás (REV)						
Sistema de control de presión de neumáticos (TPMS) directo						
Advertencia de colisión con peatones y ciclistas (VIS-DET)						
Sistema de información sobre ángulos muertos (BSIS)						
Sistema de advertencia de abandono de carril (LDW)						
Dispositivos de limitación de velocidad (SU)						
Sistema avanzado de frenado de emergencia ante peatones y ciclistas (AEB-PCD)						
Sistema avanzado de advertencia de distracciones del conductor (DDR-ADR)						

 Vehículos nuevos matriculados a partir del 06/07/2022

 Vehículos homologados a partir del 06/07/2024 y matriculados nuevos a partir del 06/07/2026

 Vehículos homologados a partir del 06/07/2022 y matriculados nuevos a partir del 06/07/2024

 Vehículos homologados a partir del 01/01/2026 y matriculados nuevos a partir del 01/01/2029

Figure 1. Mandatory systems according to Regulation (EU) 2019/2144. Source: (DGT, 2022)

## 2.2.- UNITED STATES

Special mention should be made of the United States, as it was one of the pioneers in the implementation of in-vehicle data loggers. In 1992, the US company General Motors included different devices that recorded vehicle data. These results were approved by the National Highway Traffic Safety Administration (NHTSA) and since 1998 have been extracted and used for crash investigation and reconstruction.

With regard to the legal regulation of such devices in North America, reference is made to the provisions of the Code of Federal Regulations, which contains a set of general rules and guidelines for the various executive departments of the US federal government. This document is composed of 50 provisions covering a wide range of issues with the purpose of regulating various areas at the national level. Title 49 regulates road transport, and its development is the responsibility of the NHTSA, equivalent to the DGT in Spain.

Paragraph 563 of the forty-ninth provision develops event data recorders, which must be integrated in cars manufactured after 1 September 2012. This regulation applies immediately and compulsorily to vehicles whose maximum overall weight does not exceed 3,885 kilograms.

The purpose of this measure is to define and standardise the manufacturing processes for EDR-equipped vehicles to ensure uniformity in the collection, storage and management of the data provided by these devices. In addition, criteria and requirements for car manufacturers and road accident investigators are set out.

According to Table 1, NHTSA requires that only the 5 seconds before the impact and 250 milliseconds after the impact be recorded. This period is considered sufficient to capture a complete picture of the road accident. In addition, NHTSA establishes as essential 15 items that must be recorded by EDRs. However, it allows for the collection of up to 30 additional data if standardised recording guidelines are followed among all manufacturers.

For these reasons, it is clear that the United States has been a leader in the adoption of EDR, having advanced several years compared to Europe, and has obtained positive results in the investigation of traffic accidents.

Item #	Data Elements	Recording Time*	Sampling Rate	Range	Accuracy	Resolution	Filter
1	Delta-V, Longitudinal	0 – 250 ms	100/s	-100 to 100 km/h	± 5%	1 km/h	N.A.
2	Maximum delta-V, Longitudinal	0 – 300 ms	N.A.	-100 to 100 km/h	± 5%	1 km/h	N.A.
3	Time, Maximum delta-V, Longitudinal	0 – 300 ms	N.A.	0 – 300 ms	± 3 ms	2.5 ms	N.A.
4	Speed, vehicle indicated	-5.0 to 0 s	2/s	-200 to 200 km/h	± 1 km/h	1 km/h	N.A.
5	Engine throttle, % full (accelerator pedal % full)	-5.0 to 0 s	2/s	0 – 100%	± 5%	1%	N.A.
6	Service brake, on/off	-5.0 to 0 s	2/s	On/off	N.A.	N.A.	N.A.
7	Ignition cycle, crash	-1.0 s	N.A.	0 – 60,000	± 1 cycle	1 cycle	N.A.
8	Ignition cycle, download	At time of download	N.A.	0 – 60,000	± 1 cycle	1 cycle	N.A.
9	Safety belt status, driver	-1.0 s	N.A.	On/off	N.A.	On/off	N.A.
10	Frontal air bag warning lamp	-1.0 s	N.A.	On/off	N.A.	On/off	N.A.
11	Frontal air bag deployment time, Driver (1 <sup>st</sup> stage, in case of multi-stage air bags)	Event	N.A.	0 – 250 ms	± 2 ms	1 ms	N.A.
12	Frontal air bag deployment time, RFP (1 <sup>st</sup> stage, in case of multi-stage air bags)	Event	N.A.	0 – 250 ms	± 2 ms	1 ms	N.A.
13	Multi-event, number of events (1 or 2)	Event	N.A.	1, 2	N.A.	1, 2	N.A.
14	Time from event 1 to 2	As needed	N.A.	0 - 5.0 s	0.1 s	0.1 s	N.A.
15	Complete file recorded (yes or no)	After Other Data	N.A.	Yes/no	N.A.	Yes/no	N.A.

s: second; ms: millisecond; km/h: kilometer per hour; RFP: right front passenger; N.A.: not applicable

\* Relative to time zero

Table 1. Essential data to be recorded by EDRs. Source: (NHTSA, 2006)



### 2.3.- OTHER COUNTRIES

Similar to Europe and the United States, several countries have established regulations regarding the EDRs that are incorporated in some of their vehicles.

For example, in Korea, according to KMVSS regulation Art.56-2 (MOLIT Order 534/2018), the inclusion of EDRs in passenger vehicles has been required since 2018.

In Japan, as of 2015, event data recorders have been incorporated in passenger cars, supported by the Japanese J-EDR regulation (Kokijigi 278/2008).

In Uruguay, since 2003, event data recorders have been installed only in vehicles transporting dangerous goods, in compliance with Article 11 of Decree 560/003.

Finally, in Switzerland, event data recorders are exclusive to emergency vehicles, a measure adopted in 2015 and covered by the VTS Regulation, Article 102 (Muñoz, 2022).

### 3.- EVENT DATA RECORDER DEVICE (EDR)

As mentioned in the previous section, the first analysis and research on EDRs dates back to the second half of the last century in the United States. At the time, several manufacturers opted to install some kind of device in their vehicles to record relevant data and information. Early prototypes of these devices recorded information and signals in analogue form.

A study conducted by the American Automobile Association (AAA) in 2014 revealed that 96% of cars sold in the United States already had an integrated EDR.

The incorporation of electronic sensors in vehicles has driven innovation in the global vehicle fleet, while at the same time leading to the continued development of EDRs. Car manufacturers have followed a path towards greater energy efficiency and improved safety systems.

#### 3.1.- DESCRIPTION

The EDR is an event or occurrence data recorder designed to store information related to the operation of the vehicle before, during and after an incident. This technological component is integrated in the vehicle and records this data in a chronological order, which can be retrieved after the event has taken place. It is important to note that its scope is not limited only to collisions, but covers any abnormal situation resulting in significant consequences.

This device has a physical appearance similar to a small black box and is located under one of the front seats. It is usually located at the point closest to the vehicle's centre of gravity, ensuring that factors such as acceleration or changes in cornering speed are not affected. The location of the EDR is therefore critical, as incorrect installation can cause significant interference with data collection. (Calderón, 2019).



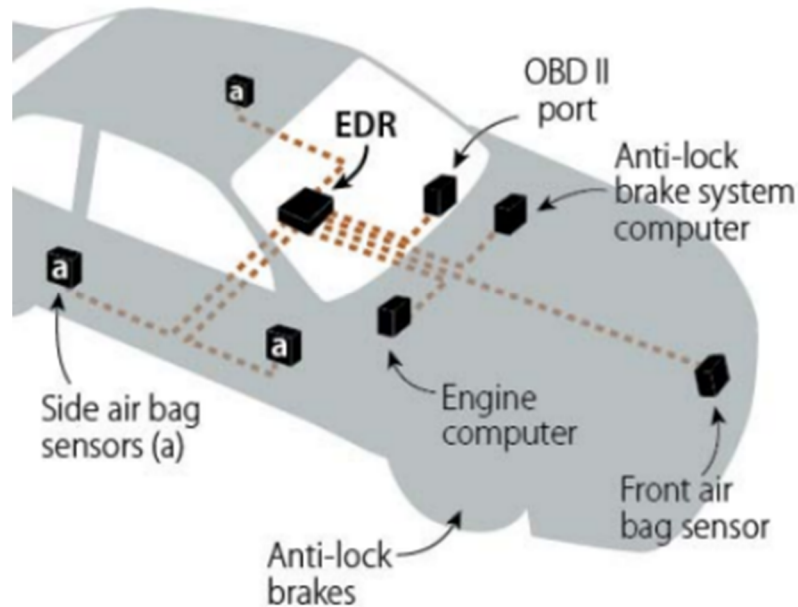


Figure 2. Location of vehicle control units. Source: (Canis B.P., 2014)

They are installed in the vehicle's airbag control unit and, in the same way, receive information from the Engine Control Unit (ECU), Airbag Control Module (ACM) or rollover sensors. These devices provide a variety of information, examples of the data it records are throttle position sensor, revolutions per minute, air flow and engine performance, including fault diagnosis.

It is important to note that the use of the data recorded directly by the EDR, rather than via the airbag control unit, is reserved for total loss cases. This is an intrusive method that can cause damage to the vehicle when the information is subsequently accessed. Therefore, the power supply to the EDR must be independent of the other electronic components of the vehicle, allowing it to record data after the incident and to retain it for the time necessary to read it.

As previously mentioned, EDR collects information from various sensors, such as the airbag control unit, Anti-lock Braking System (ABS), seat belt status, vehicle revolutions per minute and automatic collision notifications. This data is overwritten every five seconds, which means that only the most recent and closest to the event is retained.

Regarding the operation and activation of the EDR device, when the vehicle's acceleration sensors or its satellite sensors identify a force exceeding a threshold predefined by the manufacturer, usually around 1 to 2 times the force of gravity, over a certain period of time, the algorithm is initiated.

The events recorded would relate to those situations or incidents in which the vehicle is involved and in which it has exceeded the above limits. Due to the limited memory capacity, only a restricted number of events can be stored, the data of which will be overwritten over time. (Muñoz, 2022)

### 3.2.- DATA RECORDED BY THE EDR

With regard to the data recorded by the EDR, it is important to note that no direct comparison can be made with the black boxes used in aircrafts or the railway industry. Firstly, both Flight Data Recorders (FDR) and Cabin Voice Recorders (CVR) collect information about aircraft components, in addition to recording cockpit conversations. Similarly, the black boxes of trains also include a CVR. These types of black boxes operate continuously and make constant recordings, whereas vehicle EDR records data only in specific situations<sup>1</sup>.

The data recorded can therefore be clearly distinguished according to the phase in which the incident occurs: pre-collision, collision and post-collision. Below is a table describing the different data to be stored by the EDR device depending on the phase of a collision. It is also important to consider the generation of the EDR, as newer models will be able to record more data.

PRE-COLISIÓN	COLISIÓN	POST-COLISIÓN
Velocidad	Velocidad	Aceleraciones longitudinales y laterales.
Sistema de frenado	Delta-V longitudinal y lateral	Delta-V longitudinales y laterales
Presión del acelerador	Duración Delta-V	
Sistema ABS	Uso cinturones de seguridad	
Aceleración longitudinal	Activación airbags	
Ángulo de giro	Evento frontal, lateral o trasero	
Velocidad angular	Ciclos de ignición	

Table 1. Data recorded at each stage of the incident. Source: Own.

### 3.3.- READING OF RECORDED DATA

To export and read the data stored by the EDR, the OBD II (On board Diagnostics) port, which is integrated in the vehicle, is used. Originally, the OBD II port was designed for monitoring emissions and detecting potential vehicle faults. In 1996, it became mandatory for all cars manufactured in the United States, while in Europe it is regulated by Directive

---

<sup>1</sup> "There are two scenarios in which EDR records vehicle data: when there is a deployment event, such as when the vehicle's airbags deploy, or when there is a non-deployment event that meets certain criteria, such as an abrupt change in speed or direction that indicates external impact. When these thresholds are reached, EDR records the input from the vehicle's sensors for a few seconds, capturing important information about vehicle speed, driver input and other factors before, during and after a crash." (BoschCDRTool, 2022)

98/69/EC. This legislation makes the OBD II port mandatory for petrol cars from the year 2000 and for diesel cars from 2003.

As mentioned above the intrusive nature of the EDR, in accidents where the use of the OBD II port is unfeasible due to the fatal condition of the vehicle, a complete extraction of the EDR should be carried out for further analysis in the laboratory.

Currently, the different police forces in Europe that are responsible for investigating road accidents use two devices capable of extracting the relevant information stored by EDRs. These are Crash Data Retrieval (CDR) and Crash Scan, both of which require power provided by the vehicle's battery through the ACM.

Firstly, the CDR from the manufacturer Bosh is the most widespread tool on the market for extracting and reading the information recorded by the EDR. This is a device external to the vehicle that collects data and generates a report containing the events before, during and after the accident. This report contains a list of the data obtained from the EDR and communicates any known restrictions or limitations related to the specific type of EDR module being downloaded. (daSilva, 2008)

The manufacturer Bosch provides a list of those vehicles on which data reading can be performed. One limitation of this tool is that there is no single universal cable that will work in all vehicles, as cables and inputs vary depending on the make and model of vehicle.

Currently, the ATGC has two models of CDR (CDR 500 and CDR 900), which differ in the vehicles in which they can be used. They have similar software and hardware and require constant updates to enable the most complete data extraction possible.

The CDR tool maintains the integrity of the EDR data, ensuring that it is not deleted or modified, thus guaranteeing the authenticity of the information for further investigations. To perform data extraction, the CDR must be connected to both a computer with the readout software installed and to the vehicle's OBD II port. A schematic of the connection is shown below.

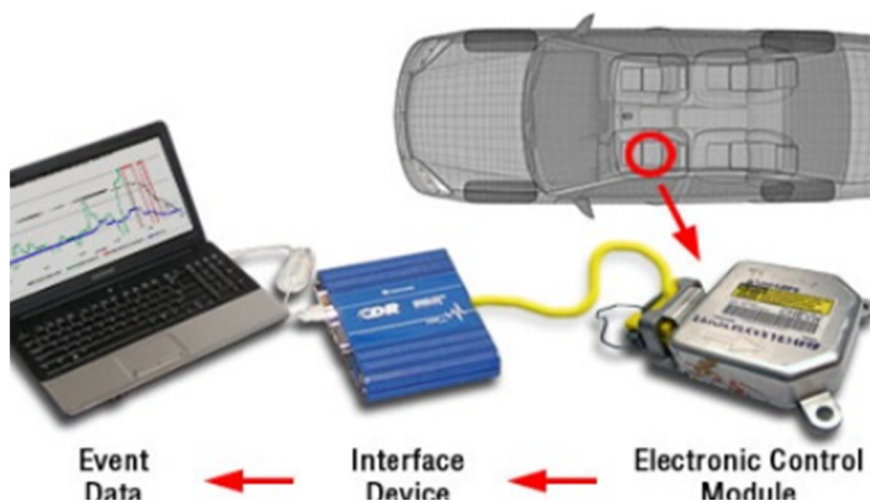


Figure 3. Bosch CDR connection. Source: (AAATeam, 2018)

Reading EDR data via the CDR can be done in three different ways:

- *"Via the DLC (Diagnostic Link Connector) port, by connecting the CDR interface module to the DLC/OBD II port and to a laptop computer, using the vehicle's wiring, and taking into account that a power source must be available, which may be external or, if available, the vehicle's own power source.*
- *By connecting the CDR interface module directly to the EDR module via cables and adapters directly in the vehicle (Direct-to-module Retrieval) and using a laptop computer.*
- *Remove the EDR module from the vehicle, readout in a firm, non-moving area, also via cables and adapters (Desktop Readout) and with connection to the software via a laptop computer."*

(Muñoz, 2022)

On the other hand, as mentioned above, there is also the Crash Scan device, which is intended to be simpler and faster to use than the Bosch CDR. Like the CDR, before reading vehicle data, it must be checked whether or not the vehicle is supported by the application.

The particularity of this device lies in the need to connect a smart device to the system via Bluetooth in order to extract the report containing the EDR data. To carry out this action, it is essential to have the Crash Scan application installed, which generates a report with the encrypted data. This information takes the form of "zeros and ones", which is transferred to Crash Scan's central servers via a highly secure HTTPS protocol.

In order to access the report and view the decrypted information, it is necessary to contact the Crash Scan server, which authorises, decrypts and sends the report in PDF format.

As can be seen on the Crash Scan application website, some of the data shown in the report are:

- Risk of injury to the vehicles involved
- Pre-collision speed
- Alerts
- Diagnosis
- Collision register
- Pre-collision data
- Condition of airbag and seat belts
- Accident warnings and indicators
- Estimate of material damage

The package provided by the company includes a cable that connects to the vehicle's OBD II port and the device itself. It is important to note that the vehicle must have the ignition on, but not be started.



Figure 4. Crash Scan Kit. Source: (CrashScan, 2022)

### 3.4.-INTERPRETATION OF THE DATA

The investigation of road crashes involves two phases: the collection of data at the scene and the analysis of the information obtained. The first stage involves the collection of physical evidence and the extraction of data from the EDR. The second phase focuses on the study and formulation of hypotheses based on these data.

It is essential to know the restrictions imposed by the EDR manufacturer before analysing the information obtained. The ability to reconstruct a road crash is a major challenge for investigators, and the quality and quantity of information plays a crucial role. Different experts may have different interpretations of an accident, which underlines the importance of collaborative review.

The EDR facilitates the work of the investigators in terms of time and resources, but does not replace the ocular inspection at the accident site and the investigators' expertise in reconstruction. These elements, combined with the EDR information, are essential for a full accident investigation.

### 3.5.- USEFULNESS OF THE DATA OBTAINED

In recent years, in-vehicle technology has led to significant advances in the automotive industry, resulting in various means of enhancing existing research. One of these developments is the EDR device, which is used by various industries to analyse causes, reconstruct road accidents and draw conclusions, among others. Below is a list of the groups that benefit from the data collected by this event data recorder:

Firstly, the integration of EDRs in vehicles is primarily aimed at improving road safety, which is consistent with the hypothesis that EDRs reduce accidents. This investment in safety benefits the general population and road users.

In addition, vehicle manufacturers use EDR data to evaluate and improve safety components that may have failed in the event of a collision or accident. This also contributes to the continuous improvement of their security systems.

EDR data is of great interest to police forces investigating and reconstructing road accidents, as it provides detailed information before, during and after the event, which helps to determine the causes and circumstances of the accident.

Also, in judicial proceedings, this accurate EDR data is used to establish accountability, especially in situations where there are no impartial witnesses. This speeds up legal proceedings and benefits lawyers, experts, courts and insurance companies.

On the other hand, the government uses this data to reduce the social costs associated with road accidents by enacting laws regulating vehicle safety and infrastructure.

The automotive industry, known for its constant innovation, uses EDR registrations to improve safety systems and vehicle structure. Therefore, when purchasing second-hand vehicles, buyers can verify whether a vehicle has been involved in previous accidents thanks to the information recorded by the EDR.

Finally, fleet operators and emergency services use EDR data to reduce fraud and improve accident care by enabling critical decisions to be made at the scene, such as assessing the severity of the accident and the condition of the victims.

### 3.6.- LIMITATIONS

The use of EDR in vehicles has generated significant debate around the privacy of the data they collect. Many car buyers have raised questions about the limits and capabilities of these devices, and civil rights organisations and human rights advocates have expressed concern that EDRs could be used for "spying" on drivers.

The EU justifies the implementation of EDRs with the approach of storing data in an anonymised form and protecting it against any form of manipulation or misuse. In addition, it ensures that data recording is limited to the time interval surrounding the collision, covering the moments before and after the event. This means that there is no function to identify the driver or owner of the vehicle, nor is there a geolocation device that can track the location of the vehicle.

It is important to note that EDRs differ from the black boxes used in aircrafts or trains in that they do not record visual or auditory information, such as images, videos or conversations inside the vehicle. Its purpose is exclusively focused on collecting data on the operation of the vehicle's safety systems and the actions that take place during a crash. This implies that the provisions of Organic Law 3/2018 of 5 December on the Protection of Personal Data and the guarantee of digital rights are not violated.

However, there is controversy about the use of data recorded by EDRs in criminal proceedings. In recent times, there has been an increase in the number of cases where this data has been admitted as empirical evidence for road accident reconstruction. However, it is essential to remember that the main purpose of the inclusion of these devices is to



improve vehicle safety by extracting data after an accident, and not to obtain personal information.

EDR is relatively new to the automotive sector, compared to its long history of use in other modes of transport, such as aviation and rail. As more experience is accumulated in its application, the data collected is likely to be progressively expanded, as has been the case in other fields. However, it is essential to have properly trained personnel to interpret the data provided by these devices.

Another limitation is the age of the Spanish vehicle fleet, as a large number of vehicles are not equipped with EDR.

Furthermore, Regulation 2019/2144 that provides for the inclusion of EDRs does not specify the data extraction process, leading to the existence of multiple multi-brand devices depending on the vehicle model and year of manufacture. This can make data extraction difficult in many cases and requires further development and standardisation in the use of these devices, from vehicle manufacturers to accident investigators.

### 3.7.- IMPORTANCE OF PHYSICAL EVIDENCE

As mentioned above, when carrying out the reconstruction and investigation of a road accident, all physical evidence found at the scene should not be forgotten. Therefore, "aspects such as tracks and traces, final positions reached by the vehicles, visibility, technical characteristics, scene of the accident, etc., continue to be the data which, complemented by what is provided by the EDR, will make it possible, through a good analysis, to determine all the aspects that gave rise to the accident, as well as the causes and circumstances in which it occurred, making the work of a good traffic accident reconstructionist essential". (Zaragoza Centre, n.d.)

There is no doubt that the EDR device simplifies the investigators' tasks and provides valuable data on the operation of the vehicle in the immediate vicinity of the accident. These data should not be evaluated separately; instead, the interpretation should consider both the human factor and the road conditions on which the driver was travelling.

The investigation of road accidents is a thorough process that focuses on clarifying any details that may have caused the accident. On interurban roads, this work is carried out by the Traffic Accident Reconstruction Team (ERAT) of the Civil Guard. Through the scientific method, it seeks to answer a number of key questions, such as what happened, who caused it, when it happened, how many people were involved, where it took place and why. Unlike other disciplines, forensic science focuses on addressing all these issues using observational, procedural and analytical approaches. Often, the answers to the questions of where, when and who are not difficult to determine, but understanding the circumstances and causes of the accident is the most challenging aspect of the investigation.

As far as the legal validity of tangible and material evidence is concerned, it is understandable that in an oral trial and in sentencing, physical evidence has greater evidentiary weight compared to, for example, testimony. However, this does not mean that testimonies should be dispensed with; rather, testimonies play an important role in linking criteria and material evidence.



In simple terms, road crash reconstruction involves investigating what happened before, during and after the event. This requires documenting in an organised and visual manner all aspects related to the scene, including infrastructure, vehicles, the human factor and the testimonies of witnesses or those involved. Below is an outline listing the evidence and proofs that should be collected from the incident.



Figure 5. Diagram of the sources of evidence to be collected in a road accident. Source: (Campón, 2019)

#### 4.- APPLICATION OF THE SHELL MODEL TO THE INVESTIGATION AND RECONSTRUCTION OF ROAD ACCIDENTS.

As previously explained in the first section, the figures for air accidents differ in number from those related to road transport. Aviation accident investigation has since its inception had an entity or organisation in charge of this purpose. In Spain, the CIAIAC is responsible for investigating civil aviation accidents.

Over the last decades, safety systems have evolved rapidly, as has the organisation in charge of conducting accident investigations. According to the interview with the CIAIAC laboratory heads, the focus of the investigation is not to answer the question "what happened", but rather "why did it happen?", and then to examine and delve into the areas that might have gone wrong, and thus achieve the goal of reducing accidents.

As in road accidents, the human factor is responsible for most of them, and the same is true in aviation. Therefore, in recent decades, much time and effort has been devoted to the study of this problem. As a result, the SHELL model was implemented in the investigations conducted by the CIAIAC. This approach aims to address what happens in an accident by analysing the interaction between the human being and his or her

environment, other road users or the vehicle itself. In this last aspect, the correlation between the data obtained from the analysis and the information provided by the EDR, in the case of road transport, can be considered.

The SHELL model was created by Elwyn Edwards in 1972, and modified in 1975 by Frank Hawkins, who provided a diagram for better understanding and visualisation.

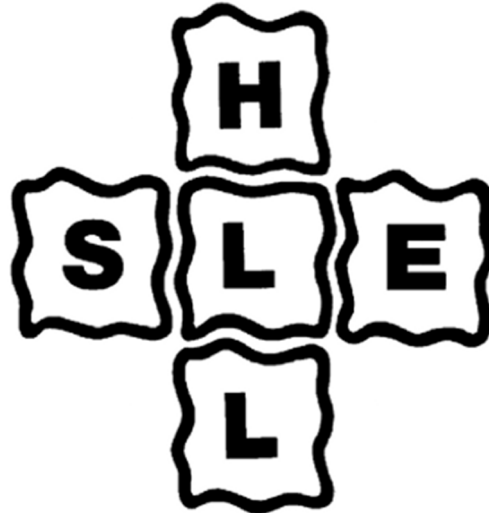


Figure 6. SHELL model diagram. Source: (Acosta, 2023)

The International Civil Aviation Organisation (ICAO) adopted this tool for the purpose of understanding the actions taken by the pilot in relation to other surrounding factors.

Similarly, the CIAIAC uses this approach to investigate civil aircraft accidents, focusing not only on the action of the pilot, but also on understanding the cause behind that action. This method is based on exploring human vulnerabilities resulting from interaction with other elements and factors involved in the operation.

The SHELL model, named after its initials, focuses on the complete study of an accident and is composed of five key interacting elements. The central component, *Lifeware*, represents people and their ability to adapt and relate to the following. *Software* refers to non-material resources, such as standards, procedures or signage. *Hardware* refers to the physical environment in which driving takes place, such as an aircraft or a car. *Environment*, on the other hand, encompasses the environment surrounding the driver, including weather conditions, stress or pressure among others.

The importance of the SHELL model lies in the study of the interactions between these elements, which will enable a comprehensive analysis of pilot behaviour, performance and safety. It provides an understanding of how people interact with their environment and how these interactions can influence accidents and their causes. The interfaces under study are detailed below:

- *Lifeware - Hardware*: this is about how people interact with machinery and equipment, which affects human performance in operations. It also highlights the importance of technology, which can sometimes hide technical problems.

- *Lifeware - Software*: refers to how people interact with non-material resources that influence driving, such as manuals, procedures and road signs.

- *Lifeware - Lifeware*: focuses on interpersonal relationships in the work environment, such as the interaction between pilots, controllers, engineers and other professionals.

- *Lifeware - Environment*: this interface studies the relationship between people and the environment, both internal and external. It includes factors such as temperature, noise, weather conditions, road infrastructure and how these influence drivers' decision-making.

(International Civil Aviation Organization, 2012).

#### 4.1.- BRINGING THE SHELL MODEL TO ROAD TRANSPORT

The SHELL model, which is widely used in aviation for safety assessment, can be beneficial for road crash investigations. This approach is based on the relationships between the human component (*Lifeware*) and the systems involved in driving, such as *software*, *hardware* and the environment.

Following the interview with the CIAIAC laboratory heads, it is concluded that the SHELL model is clearly applicable to road crash investigation. This holistic approach is able to identify the aspects that have a decisive influence on the overall security of the system. Thus, when reconstructing a road accident, it is essential to analyse each of the above-mentioned components, both in isolation and in relation to the human factor.

Therefore, when examining the L-Hardware (*Lifeware - Hardware*) relationship, vehicle safety features such as brakes, airbags and steering systems are analysed. EDR data can be used to understand how these systems performed during the crash, providing information on speed, pedal use and other relevant parameters.

The *L-Software* interface focuses on on-road information such as traffic signs and pavement conditions. The height and visibility of signs, the amount of information and whether the state of the pavement can influence the driver's decision making are also under study.

In the *L-Environment* relationship, the importance of weather and environmental conditions is emphasised, as they can affect driver behaviour. Factors such as light, pavement conditions and visibility are crucial in understanding road crashes.

Finally, the *L-Lifeware* relationship focuses on the human factor, which is responsible for the majority of claims. Mental state, stress, fatigue, distractions and other driver-related aspects are analysed. Understanding these factors is essential to identify the causes of the accident and prevent future incidents.

In summary, the SHELL model's approach to operational safety is applicable to road crash investigation, enabling a deeper understanding of the factors contributing to road crashes and facilitating the prevention of future crashes.

## 5.- CONCLUSIONS AND FUTURE LINES OF ACTION

Every year, more than one million people worldwide lose their lives and around fifty million suffer serious injuries due to road accidents, alarming figures that are unanimously condemned by all international bodies, since most of them could be prevented.

In Spain, the authorities in charge of maintaining public order and safety carry out road accident investigation and reconstruction tasks. The Civil Guard, for example, delegates this responsibility to two specialised teams: the ERAT and the Traffic Accident Investigation and Reconstruction Department (DIRAT). These teams take on the task of analysing the most serious and significant road crashes within their jurisdiction.

With regard to current regulations, it is relevant to note that Regulation (EU) 2019/2144 of the European Parliament and of the Council, enacted on 27 November 2019, establishes the requirement for newly type-approved vehicles to incorporate an incident data recorder. However, it is important to note that this regulation does not address the specific programmes or systems needed to extract the stored information. Consequently, this regulation represents the first step in the incorporation of these devices, anticipating the potential development and usefulness of EDRs in the near future.

The information currently captured by EDRs, which includes data such as speed, vehicle steering angle and the moment the brake is activated, simplifies investigative tasks in accident reconstruction. However, it is essential that researchers properly interpret the data extracted and be aware of the specific data limitations of each vehicle in question. This implies that the information provided by EDRs should not be analysed in isolation, but should be seen as a complement to the research practices that have been carried out so far.

Although the data collected by EDRs is anonymous and cannot be linked to a specific individual, the presence of an EDR in a vehicle can act as a deterrent to driver behaviour. This is because actions such as driving at excessive speeds or other evasive behaviour can be verified by analysis of the recorded information, which in turn could have implications in terms of compensation payable or determination of liability.

In addition to its role in accident reconstruction, EDRs make it possible to obtain information on the vehicle's condition and behaviour in the moments close to a collision. This gives car manufacturers the opportunity to invest in improvements to vehicle safety systems to prevent future accidents.

Currently, EDRs have limitations in terms of the data they collect, but technological advances will allow the measurement of other aspects, such as fatigue or distractions. This is similar to the technology that has been used for years in aircraft black boxes, which can detect pilot stress or fatigue through voice frequency or flicker, for example. All these data will facilitate the investigation and reconstruction of road accidents.

However, if road accidents are to be eradicated, an additional step is essential. It is not enough just to identify the root causes of the incident, but it is also necessary to understand why it happened in the first place, in order to prevent future recurrences. To achieve this qualitative advance, it would be beneficial to incorporate several elements of the SHELL model into the Model of Sequential Events for Traffic Accidents (MOSES) currently used by the ATGC to investigate road accidents.

The SHELL model, as mentioned above, focuses on the human factor and its relationship with other individuals, the infrastructure, the environment, the vehicle and other non-material resources that influence driving. This is done in order to prevent future accidents.

One issue that has not been addressed in this article due to its breadth is the relationship of EDRs to the other sensors that will be installed in vehicles in the future. This will allow the driver to receive as much information as possible to adapt his or her behaviour to various situations and prevent incidents, a situation that would be linked to the concept of connected vehicles and, possibly in the more distant future, to the idea of autonomous vehicles.

Furthermore, in the coming years, EDRs could be conceived as devices similar to the tachograph used in professional transport. In this way, traffic authorities could require their use and, through handheld readers, access the driver's behaviour at a specific moment in time.

It is clear that this progress represents the first steps towards the goal of zero road deaths by 2050, without neglecting the importance of investment in training, education, monitoring and enforcement.

## 6. BIBLIOGRAPHY

- ACOSTA, M. (11 February 2023). *The SHELL Model*. AVSAF/AVSEC training: <https://www.avsaf.es/post/el-modelo-shell>
- STATE AGENCY FOR RAILWAY SAFETY. (2022). *Annual Report 2022. Status until 31 December 2021*. Ministry of Transport, Mobility and Urban Agenda. [https://www.seguridadferroviaria.es/recursos\\_aesf/ias\\_nsa\\_espana\\_2022.pdf](https://www.seguridadferroviaria.es/recursos_aesf/ias_nsa_espana_2022.pdf)
- ASSOCIATION FOR THE ADVANCEMENT OF AUTOMOTIVE MEDICINE. AAAM TEAM. (17 January 2018). *Event Data Recorder (EDR). Position Statement*. Association for the Advancement of Automotive Medicine: <https://www.aaam.org/event-data-recorder-position-statement/>
- BOSCHCDRTOOL. (2022). *The Bosch CDR Tool. Key Applications for Insurance and Law Enforcement. Crash Investigators*. <https://crashdatagroup.com/pages/the-bosch-cdr-tool>
- CALDERÓN, P. G. (2019). *Study of the feasibility and design of black boxes for vehicles as an aid to police investigation in traffic accidents*. Final Degree Project

- CAMPÓN DOMÍNGUEZ, J. A. (2019). *Road Accident Investigation Manual (Attestations)*. Ministry of the Interior. Directorate-General of the Civil Guard. General Traffic Authority
- ZARAGOZA CENTRE. (n.d.). EDR (Event Data Recorder) reading process. *Technical magazine of ZARAGOZA CENTRE*:<https://revistacentrozaragoza.com/proceso-de-lectura-de-edr-event-data-recorder/>
- CODE OF FEDERAL REGULATIONS. (28 August 2006). *PART 563 - EVENT DATA RECORDERS*. Title 49. <https://www.ecfr.gov/current/title-49/subtitle-B/chapter-V/part-563>
- Standing Commission for Maritime Accident and Incident Investigations. (2022). *Annual Report 2021*. Ministry of Transport, Mobility and Urban Agenda. [https://www.mitma.gob.es/recursos\\_mfom/comodin/recursos/ciaim\\_informe\\_anual\\_2021\\_web.pdf](https://www.mitma.gob.es/recursos_mfom/comodin/recursos/ciaim_informe_anual_2021_web.pdf)
- CRASH SCAN. (2018). *Collision Sciences Claims Report*. <https://www.collision-sciences.com/services.html>
- DASILVA, M. P. (2008). *Analysis of Event Data Recorder Data for Vehicle Safety Improvement*. National Highway Traffic Safety Administration. [https://rosap.nhtl.bts.gov/view/dot/6182/dot\\_6182\\_DS1.pdf](https://rosap.nhtl.bts.gov/view/dot/6182/dot_6182_DS1.pdf)
- DIRECTORATE-GENERAL FOR TRAFFIC (DGT). (2021). *Accident Statistical Yearbook 2021*. Ministry of the Interior. [https://www.dgt.es/export/sites/web-DGT/galleries/downloads/dgt-en-cifras/publicaciones/Anuario-Estadistico-de-Accidentes/Anuario-Accidentes-2021\\_vf.pdf](https://www.dgt.es/export/sites/web-DGT/galleries/downloads/dgt-en-cifras/publicaciones/Anuario-Estadistico-de-Accidentes/Anuario-Accidentes-2021_vf.pdf)
- DIRECTIVE 2009/18/EC of the European Parliament and of the Council of 23 April 2009 establishing the fundamental principles governing the investigation of accidents in the maritime transport sector and amending Council Directive 1999/35/EC and Directive 2002/59/EC of the European Parliament and of the Council. *Official Journal of the European Union*, 131, 28 May 2009. <https://www.boe.es/doue/2009/131/L00114-00127.pdf>
- INTERNATIONAL CIVIL AVIATION ORGANIZATION. (2013). *Safety Management Manual (SMM)*. Third Edition. <https://www.icao.int/SAM/Documents/2017-SSP-GUY/Doc%209859%20SMM%20Third%20edition%20en.pdf>
- ORGANIC LAW 3/2018, of 5 December, on the Protection of Personal Data and Guarantee of Digital Rights. *Official State Gazette*, 294, 6 December 2018. <https://www.boe.es/eli/es/lo/2018/12/05/3/con>
- MUÑOZ RODRÍGUEZ, J. C. (16 May 2022). Application of the Model of Sequential Events for Traffic Accidents (MOSES) with the data collected from the electronic systems installed in the accident vehicles. *Master's Thesis*.



- NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION (NHTSA). (2006). *Event Data Recorders (EDRs). Final Regulatory Evaluation*.  
<https://www.nhtsa.gov/sites/nhtsa.gov/files/fmvss/EDRFRIA.pdf>
- NATIONAL OBSERVATORY FOR ROAD SAFETY (DGT). Ministry of the Interior. (2022). *Road Safety Strategy 2030*. Directorate-General for Traffic.  
[https://seguridadvial2030.dgt.es/export/sites/sv2030/.galleries/descargas/Estrategia\\_de\\_Seguridad\\_Vial\\_2030.pdf](https://seguridadvial2030.dgt.es/export/sites/sv2030/.galleries/descargas/Estrategia_de_Seguridad_Vial_2030.pdf)
- NATIONAL OBSERVATORY FOR ROAD SAFETY (DGT). Ministry of the Interior. (2022). *Main road accident figures - Spain 2021*. Directorate-General for Traffic.  
[https://www.dgt.es/export/sites/web-DGT/.galleries/downloads/dgt-encifras/publicaciones/Principales\\_Cifras\\_Siniestralidad/Las-principales-cifras-2021\\_vf\\_LI\\_vf.pdf](https://www.dgt.es/export/sites/web-DGT/.galleries/downloads/dgt-encifras/publicaciones/Principales_Cifras_Siniestralidad/Las-principales-cifras-2021_vf_LI_vf.pdf)
- ROYAL SPANISH ACADEMY. (13 March 2023). *Definition of: Safety*. Pan-Hispanic dictionary of legal Spanish:  
<https://dpej.rae.es/lema/seguridad#:~:text=Gral.,todo%20peligro%2C%20da%C3%B1o%20o%20riesgo>.
- REGULATION (EC) 661/2009 of the European Parliament and of the Council of 13 July 2009 concerning type-approval requirements for the general safety of motor vehicles, their trailers and systems, components and separate technical units intended therefor. *Official Journal of the European Union*, 200, 31 July 2009.  
<https://www.boe.es/doue/2009/200/L00001-00024.pdf>
- REGULATION (EU) 2019/2144 of the European Parliament and of the Council of 27 November 2019 on type-approval requirements for motor vehicles and their trailers, and for systems and components intended for such vehicles. *Official Journal of the European Union*, 325, 16 December 2019.  
<https://www.boe.es/doue/2019/325/L00001-00040.pdf>
- EUROPEAN PARLIAMENT RESOLUTION of 6 October 2021 on the European Union Road Safety Policy Framework for 2021-2030. Recommendations on the next steps towards Vision Zero, *Official Journal of the European Union*, 132, 24 March 2022.  
<https://eur-lex.europa.eu/legal-content/ES/TXT/?uri=CELEX:52021IP0407>





**Marco Teijón Alcalá**  
Universidad Nacional de Educación a Distancia  
(UNED)

**PROTECTED LEGAL RIGHTS IN OFFENCES  
AGAINST ROAD SAFETY: TOWARDS A  
MODEL OF SYSTEMIC FUNCTIONALISM**



## PROTECTED LEGAL RIGHTS IN OFFENCES AGAINST ROAD SAFETY: TOWARDS A MODEL OF SYSTEMIC FUNCTIONALISM

**Summary** 1. INTRODUCTION. 1.1. The concept of a legal right. 1.2. Criteria for the selection of legal rights. 1.3. Road safety as a collective legal right. 1.4. Crimes of endangerment as an emerging tool for the protection of collective legal rights. 2. CRIMINAL PROTECTION OF ROAD SAFETY. 2.1. The protection of individual legal rights. 2.2. Road safety as an autonomous collective legal right. 2.3. Road safety as an intermediate legal right. 2.4. Road safety as a guarantee of a safe environment. 2.5. The validity of the norm as a right to be protected. 3. OTHER LEGAL RIGHTS PROTECTED IN ROAD TRAFFIC OFFENCES. 3.1. Leaving the scene of the accident (Art. 382 bis CC). 3.2. Refusal (Art. 383 CC). 3.3. Driving without a licence (Art. 384 CC). 4. CONCLUSIONS 5. BIBLIOGRAPHY

**Resumen:** En el presente trabajo se examina el significado tradicional de lo que se conoce en la doctrina como «bien jurídico protegido», con especial referencia a los de carácter colectivo. A tal fin, se analiza la función que este tipo de bienes vienen desarrollando históricamente para el Derecho penal, así como los criterios que legitiman su selección. Por otro lado, se discute la naturaleza de la «seguridad vial» como bien jurídico colectivo y se analizan las herramientas legislativas que el sistema penal ofrece para su protección. De igual forma, se exponen las diferentes posturas dogmáticas que la doctrina propone para la protección de bienes colectivos. Finalmente, se discute si la redacción típica de determinados delitos contra la 'seguridad vial' permite asumir que sea realmente ésta el objeto de tutela penal. A tal fin, se evalúan las diferentes propuestas doctrinales y jurisprudenciales sobre el eventual bien jurídico tutelado en cada uno de esos tipos penales. Como conclusión, consideramos que, en tales delitos, por su configuración típica, no se protege realmente la seguridad vial, sino otros bienes jurídicos más difusos o de muy difícil justificación; o que, directamente, se prescinde de la figura del bien jurídico como criterio principal de punición.

**Abstract:** In the present work, we examine the traditional meaning of what is known in legal doctrine as the "protected legal interest," with a special focus on those of a collective nature. To this end, we analyse the historical role that such interests have played in criminal law, as well as the criteria that legitimize their selection. Additionally, we discuss the nature of "road safety" as a collective legal interest and analyse the legislative tools provided by the criminal justice system for its protection. Likewise, we present various doctrinal perspectives on the protection of collective interests. Finally, we explore whether the typical structure of certain offenses related to 'road safety' genuinely serves as the object of criminal protection. To this end, we examine different doctrinal proposals and jurisprudential decisions regarding the legal interest safeguarded in each of these criminal types. As a conclusion, we argue that in these offenses, due to their typical configuration, road safety is not genuinely protected. Instead, reference is made to diffuse legal interests that are challenging to justify, or, directly, the concept of the legal interest is effectively set aside as the primary criterion for punishment.

**Palabras clave:** Bien jurídico protegido, bienes colectivos, seguridad vial, delitos de peligro.

**Keywords:** Legally protected interest, collective interests, road safety, offenses of endangerment

## 1. INTRODUCTION

### 1.1. The concept of a legal right

The concept of legal right, as we know it today, does not appear in dogmatic history until the beginning of the 19<sup>th</sup> century (García Arroyo, 2022, pp. 5-6). According to this author, since then, the doctrine has been delimiting the content and concept of legal right to the sociological, philosophical and legal context in force at each specific time. Throughout this delimiting process, we have moved from a scientific and technical configuration (Birnbbaum, 1834) to a legal conception that is configured as an evaluative creation of the legislator (Binding). In this way, the legislator determines the object of protection through the norm, and the legal right is therefore established in the norm. However, other currents point out that the legally protected interest is not created by the legal system, but is prior to the law, has its origin in social reality, and, in this sense, the legislator is limited to guaranteeing its protection (Von Liszt, 1925). In other words, the legal right has an extra-legal origin that the State protects through criminal law (García Arroyo, 2022). This debate is of great practical importance, since, if we place the legal right at the centre of the theory of crime, it will be the clearest limit to the *ius puniendi* of the State with transcendence to the moment prior to the creation of a criminal offence. However, from this point onwards, other positions have emerged that give the legal right a more spiritual character (Hegel, 1999). For these positions, which conceive the legal right as a value of culture, the crime will constitute an infringement of cultural values, and this automatically incapacitates the concept of legal right to comply with the limit to *ius puniendi* to which we referred (García Arroyo, 2022).

A legal right is what is considered at any given moment an “ideal value of the social order” (Jescheck, 1981, p. 351). That is to say, a value that transcends the concrete object in which it is embodied (Lacruz, 2015, p. 9). The identification of the (legal right) to be protected in each offence will be absolutely necessary for, among other things, the correct understanding and interpretation of that offence. For this reason, most doctrine places the protection of legal rights at the centre of the criminal justice system's mission (Maldonado, 2006, p. 25). In this work, we assume that the main function of the criminal law is to protect those legal rights that allow social coexistence. In other words, rights that, in the words of Abanto Vásquez (2006, p. 2) express the “most transcendent values for human coexistence in society”. In this sense, the intervention of criminal law is only legitimised insofar as it fulfils such an important function (García Arroyo, 2022, p. 5). For this reason, we can only start from a material conception of the legal right.

### 1.2. Criteria for the selection of legal rights

According to Maldonado (2006, pp. 26-27), the option to criminally protect a legal right, and thus transform it into a criminal legal right, is based on a double consideration: merit and necessity. Deservingness has to do with the social significance or importance of the right insofar as it makes community living possible. The need, for its part, derives from the fact that the means of social control (formal or informal) to obtain the due respect and protection of this right are insufficient.

Two doctrinal perspectives have been used for the selection of the legal rights that, according to the above, should deserve and/or need criminal protection: sociological functionalist theories and constitutionalist theories (García Arroyo, 2022, p. 14). According to the former, the legal right is found in the sphere of social reality, and,

consequently, the delimiting criterion for the configuration of criminal offences is that of social harmfulness (Silva Sánchez, 2012, pp. 426 et seq.). This means that the commission of a criminal act would imply damage to the social system (García Arroyo, 2022, p. 18).

In contrast to the previous approaches, the majority of criminal doctrine considers that the safest source from which to extract or derive the legal rights is the Constitution (Álvarez García, 1991, pp. 20 et seq.; Bricola, 1963, pp. 15 et seq.; Escribá Gregori, 1980, pp. 157 et seq.; González Rus, 1983, p. 25; Roxin, 2008, p. 25). According to the more orthodox approaches (strict constitutionalist theories), the values enshrined in the Constitution must be reflected in parallel or coincidentally in criminal law. However, a sector of the doctrine considers that this orthodox position is insufficient to protect relevant legal rights (deservedness and necessity) in a social and democratic state governed by the rule of law. Such an approach, for example, would be insufficient for the protection afforded to road safety, as this is a right that is not explicitly enshrined in the Spanish Constitution. For this reason, doctrinal currents (broad constitutionalist theories) have emerged which maintain that the only way to legitimise penal intervention in certain sectors of social activity (such as road safety) is “by resorting to the implicit valuations that support life or psycho-physical integrity” (Caro Coria, 1997, p. 157). As we can see, strict constitutionalist theories propose a direct link between legal right and constitutional precept (Alvarez García, 1991, pp. 20 ff.; González Rus, 1983, pp. 23 ff.), while broad constitutionalist theories propose a programmatic link between the legal right and the Constitution (Berdugo Gomez de la Torre, 1991). However, while the first criterion is not acceptable by default, the present one is also criticised for its inadequacy, but for excess, since, in today's (risk) society, practically everything is related to or affects in one way or another the individual legal rights enshrined in the Constitution (life, health, freedom, etc.). Such reasoning, therefore, as Caro Coria (1997, p. 157) points out, can lead to extremes of uncertainty in the limits of criminal protection (which is precisely one of the distinctive features of criminal policy and criminal law in recent decades).

In this paper, we consider the Constitution to be the ideal frame of reference for the selection of criminally relevant legal rights, given that its validity constitutes the maximum exponent of social interest or consensus. However, seeking an eclectic thesis to the constitutional theses mentioned above (broad and restrictive), we agree with Hefendehl (2016, pp. 173 et seq.) that the Constitution will allow establishing the minimum requirements for the legitimacy of criminal offences. In other words, the interests directly enshrined in the Constitution must constitute the minimum content (or negative limit) that any penal system, at all times, must protect. However, more must be demanded of the broad constitutionalist thesis. For this reason, we consider that the programmatic link between the legal right and the Constitution should constitute the maximum content (or positive limit) of protection (Octavio de Toledo and Ubieto, 1990, p. 10 et seq.), but only if this legal right meets the aforementioned criteria of merit and necessity (Maldonado, 2006). In this sense, we agree with Berdugo (1990) insofar as it is necessary to link the criminal legal right to the social goals imposed by Article 9.2 EC, which includes the need to criminally protect certain elementary collective legal rights, such as, for example, road safety (Cerezo Mir, 2002, p. 56). Not only that, but following the more personalist thesis, the legal right must also be linked to Art. 10 EC, which, as is well known, refers to the dignity of the person, to the inviolable rights inherent to them and to the free development of the personality (as the basis of political order and social peace). The core idea of personalist approaches lies in “considering as legal rights those objects that human beings need for their free self-realisation”, insofar as they “are

endowed with a content of value for the personal development of man in society” (see García Arroyo, 2022, p. 23). Therefore, the maximum content or positive limit of the object of criminal law protection is thus situated in “the conditions that make possible the free development of the individual through their participation in social life” (Silva Sánchez, 2012, p. 431).

### 1.3. Road safety as an intermediate legal right

The doctrine generally distinguishes between individual, supra-individual and collective legal rights, establishing a clear separation between the three categories (Lacruz López, 2017, pp. 9 et seq.). However, there is sometimes some confusion over the latter two. Some authors use both concepts interchangeably (Cabezas Cabezas, 2013, p. 254; Terradillos Basoco, 2001, p. 84). Others use different terminology to refer to rights that transcend the individual. These are universal (Hassmer and Muñoz, 2012, p. 108), state-controlled (Pérez-Sauquillo Muñoz, 2019, p. 52), institutionalised or immaterial (Rodríguez Montañés, 1994, pp. 297 ff.), macro-social (Terradillos Basoco, 2001, p. 78), diffuse (Doval País, 1994, pp. 42 ff.) or vague (Cerezo Mir, 2002, pp. 54-55). Finally, for other authors, supra-individual legal rights constitute the genus, while all of the above are the species (Pérez-Sauquillo Muñoz, 2019, p. 52). In our opinion, there is a difference between the two, which is based on the fact that supra-individual legal rights are based on the protection of the conditions necessary for the functioning of the system, while collective rights, as we will see, are based on their direct link with individual rights (Lacruz López, 2017, p. 14). In the first case, therefore, the legal right transcends the purely individual sphere and covers situations, interests or relations pertaining to the State or the Community. Collective legal rights, on the other hand, constitute a kind of servitude for the protection of individual legal rights. In other words, they will always be a function of the existence of the “individual *prius*” (Lacruz López, 2017, p. 13).

The doctrine usually defines road safety as a collective legal right (Alastuey Dobón, 2004, p. 88; Cerezo Mir, 2002, p. 58; Feijóo, 2005, p. 308). However, within collective legal rights, different approaches are usually identified, depending on the different forms of specific and specific disruption of these legal rights. The impairment of a legal right of a collective nature can be defined: a) as an actual impairment or injury to the legal right itself (i.e. road safety); b) as a state prior to the impairment of an individual legal right (i.e. life, physical integrity, etc.); or c) as a guarantee for a safe environment or for the peaceful disposal of property (i.e. traffic). In this sense, from a dogmatic point of view, the doctrine is not entirely clear as to what is really intended to be protected in offences against road safety. This will depend on how this legal right to be protected is defined or conceived. In reality, as Feijóo (2000, pp. 156-158) points out, the object of protection is always the same (individual legal rights), what varies is the technique of protection. According to this author, the same protection is always sought for legal rights of a personal nature, but by means of offences that have a different typical structure.

### 1.4. Crimes of endangerment as an emerging tool for the protection of collective legal rights

As is well known, the main technique of protection for legal rights of a collective nature is the creation of criminal offences with the structure of a dangerous offence\*. Within this type of crime, a distinction is generally made between crimes of abstract danger and crimes of concrete danger (see Bacigalupo, 1999, pp. 101-102; Terradillos Basoco, 2001,



pp. 62-77), although in recent years the doctrine has been incorporating other intermediate dogmatic categories (Terradillos Basoco, 2001, pp. 78-79). In this type of crime, the danger is stated in reference to a legal right, which according to the doctrine, as we have seen, can have an individual (or individualisable), supra-individual or collective nature (Lacruz López, 2017, pp. 11-14; Terradillos Basoco, 2001, p. 78). Kindhäuser (2009) distinguishes between three forms of impairment of legal rights: injury, concrete danger and disturbance of the “conditions of safety that are indispensable for the carefree enjoyment of the rights” (p. 15). Other authors argue that crimes of abstract danger protect collective legal rights, while crimes of concrete danger preferentially protect individual legal rights (Cabezas Cabezas, 2013, pp. 103-104). Schmidt (1999), quoted by Feijóo (2005, p. 328), for his part, considers that the function of criminal offences with the structure of crimes of abstract danger is to create a system of safety for the enjoyment of individual legal rights. In similar terms, Mendoza Buergo (2002), following Kindhäuser (2009, p. 14), considers that, through crimes of abstract danger, what is being protected are “*sui generis* damages” with their own independent harmfulness. In other words, a *sui generis* damage is protected that consists of the impairment of the possibility of disposing of the legal rights in a safe way (Cerezo Mir, 2002). Jakobs (2006), in the context of functionalist theory, considers that it is necessary to resort to crimes of abstract danger in order to organise a certain area of social activity (such as traffic) through the standardisation of conduct. Therefore, these types of offences operate simply as offences of mere disobedience to the norm. In this sense, crimes of injury involve the arrogation of other people's areas of organisation (individual or supra-individual); those of concrete danger, the illegitimate lack of protection of these areas; while those of abstract danger, the improper organisation of one's own area of organisation.

With regard to the link between crimes of distress and the legal right protected, the adoption of one or other position on the latter (the legal right protected) has important implications in terms of the configuration and interpretation of the former (the crimes of distress), particularly with regard to the moment and requirements for their commission. Thus, it is possible to identify up to five ways in which crimes of endangerment can protect legal rights to which the doctrine grants a collective character: i) the direct protection of individual legal rights directly affected; ii) the direct protection of the collective legal right (as an autonomous right); iii) the instrumental protection of the collective legal right (as a prelude to the protection of other individual legal rights); iv) the protection (also instrumental) of the collective legal right (but) as a guarantee of a safe environment and; v) the mere protection of the norm. In the latter case, as is well known, no reference to the legal right is made, attributing the need for criminal punishment to the very reaffirmation of the validity of the norm. All of this, as we have already pointed out, in relation to the different forms of protection that our current criminal law, through the use of the offence of endangerment, grants to road safety.

## 2. CRIMINAL LAW PROTECTION OF ROAD SAFETY

### 2.1. The protection of individual legal rights

Individual legal rights, as is well known, are those whose bearer is the individual (life, health, honour, freedom, physical integrity, etc.). These are rights whose protection belongs to the historical core of liberal criminal law. As we have already mentioned, there are authors who consider that road safety would fall within this historical core insofar as what is being directly protected by this type of crime is the integrity of all road users. Hefendehl (2001, p. 155), for example, considers traffic safety to be simply

the protection of the individual legal rights (such as life or health) of those involved in motor vehicle traffic. For this author, road safety is not a collective legal right, but rather an apparent legal right, since the ultimate protection of individual legal rights is what is sought through the exemption of this type of offence (Hefendehl, 2001, p. 155). Mañalich (2021, p. 81), on the other hand, distinguishes between two criminal typologies through which the protection of an individual legal right can be assumed: crimes of abstract-special danger and crimes of abstract-general danger. In what is of interest here, Mañalich (2021, p. 92) considers that the protection of an individual legal right against abstract danger is special when what is protected is the property as the object of a “disposition or non-dangerous use by a singularised owner of that same property”. On the other hand, Mañalich (2021, p. 92) maintains that its protection is general when it is a matter of “ensuring the possibility of the generality of its holders to dispose of or take advantage of the (individual) legal right in a non-dangerous way”.

In reality, as the offences against road safety are drafted and configured in our current Criminal Code, it is difficult to sustain some of the positions mentioned. Perhaps the first approach of Mañalich (2021), insofar as it refers to the non-dangerous disposition of individual rights, is the only possible way to consider that individual legal rights are directly protected in road safety offences. However, in these cases, in our opinion, we are dealing with a variant of what we have been calling here the enjoyment or provision of a safe environment, since Mañalich (2021) refers to a type of (special) protection of individual legal rights that is not based on their injury, but on the safe enjoyment by a holder.

## 2.2. Road safety as an autonomous collective legal right

As mentioned above, there are those who believe that (road) safety is in itself a legal right that must be protected by criminal law. For this reason, some authors consider that, in reality, criminal offences that protect a right of this nature are not really offences of danger, but of result, given that any activity that is dangerous in this way will involve a breach of safety and, in this sense, damage to the right. In this way, road safety becomes a right in its own right. In this sense, the mere commission of the dangerous behaviour implies *per se* the infringement of the protected right (e.g. road safety). In the words of Rodríguez Mourullo (1966, p. 148), “by configuring a specific crime of danger, the law converts the safety of another right into a legal right. Thus, the breach of the safety of this right already entails the infringement of the legal right specifically protected in the offence of endangerment, even if it does not yet entail more than a risk to another right. The safety of certain rights may already be a legal right in itself.” According to this approach, collective safety constitutes a legal right of an autonomous nature, which justifies the raising of the barriers of punishment to conducts that are considered merely dangerous for individual legal rights, but which, in this way, constitute in themselves, the ‘injury’ of a collective legal right such as, for example, road safety (Corcoy Bidasolo, 1999, pp. 34-37). Therefore, if we understand road safety as an autonomous legal right, it no longer makes sense to speak of offences of danger, but of crimes of result, since any conduct considered dangerous would in itself imply a harm to the legal right of road safety.

However, we consider that this approach is not consistent with the theory of the legal right as a criterion for criminalisation, as this could lead to punishing conduct that would not be serious enough to constitute a criminal offence (Cerezo Mir, 2002).

### 2.3. Road safety as an intermediate legal right

According to Alastuey Dobon (2004, p. 88), the configuration of traffic safety as a legal right to be protected is due to the need to protect individual legal rights in advance. In similar terms, Lacruz López (2017, p. 12) considers that the recognition of collective legal rights is a necessary anticipation (in a social state) of the traditional protection granted to individual legal rights (typical of the liberal state). In the words of Feijóo (2005, p. 308), “the legal right of safety is thus dogmatically configured as a collective legal right with an individual referent”. In this sense, we are dealing with (collective) legal rights that are subordinate or complementary to those of an individual nature. In other words, they protect interests or situations whose defence is considered necessary for the protection of “genuine individual or individualisable legal rights” (Terradillo Basoco, 2001, p. 89).

In contrast to the position taken in the previous section, the existence of a collective right is not understood now in an autonomous, independent way, but always as an expression of the presence of a series of individual legal rights whose barriers to protection are thus advanced. Here it is the endangering of individual legal rights that is punishable. In road safety offences, there is no doubt that the ultimate aim is to protect the life, physical integrity, health and even property of individuals (Feijóo, 2005). Feijóo (2000, pp. 156-158), in the terms already indicated, states that “traffic safety is an intermediate collective legal right with a clear individual referent”. Therefore, in crimes of concrete danger, safety is thus constituted as an intermediate legal right whose political-criminal legitimacy lies precisely in the individual referent (Doval País, 1994, pp. 42 et seq.). For all these reasons, a broad sector of the doctrine rules out the possibility of giving collective legal rights an autonomous character, so that they can be the object of criminal protection without reference to individual legal rights (Cerezo Mir, 2002).

In the case of offences against road safety, as we have been maintaining, only the ultimate reference to individual legal rights (life, physical integrity, etc.) whose projection is served by collective legal rights (road safety) “gives the infringement of traffic regulations a sufficiently serious material content of wrongdoing to constitute a criminal offence” (Feijóo, 2000, p. 158).

### 2.4. Road safety as a guarantee of a safe environment

Schmidt (1999), quoted by Feijóo (2005, p. 328), rejects the dogmatic concept of legal right and uses instead a political-criminal concept prior to criminal law that limits the options of the criminal legislator. In this way, Schmidt (1999) introduces the term “safe environment” of the rights as an object of protection to refer to the conditions that guarantee the safe disposal of individual legal rights. According to this author, in line with Kindhäuser's theory, the function of criminal offences structured as crimes of abstract danger is to create a system of safety for the enjoyment of individual legal rights. In this way, the infringement of such norms leads to a situation of insecurity for all those (individual) legal rights that are to be provided with safety. This approach is in line with the position of Jakobs (2000, p. 163), insofar as he considers that “sufficient cognitive safety is a necessary condition for the enjoyment of the rights. Without such safety, the rights are not “good”, and that is why it has been formulated that safety is itself a legal right. Therefore, there is no logical or evaluative difference between the existence of safety and the existence of the right”. Therefore, as Mañalich (2021, p. 89) maintains, here the legal good receives direct protection against a form of impairment specifically

referring to the “conditions of its availability or rationally controllable use”. In this sense, Mendoza Buergo (2002, p. 49) considers that the harmfulness of the conduct is projected in these cases in the affectation “to the possibility of disposing of the rights in a safe way”. This author assumes that criminal law must not only protect the integrity of legal rights, but also “guarantee the possibility of a safe disposal of these rights”. For this reason, he maintains that the criminalisation of conducts with the structure of crimes of abstract danger is intended to prevent “the impairment of the heteronomous conditions of safety necessary to enable the safe and carefree disposal of rights”, while ensuring the peaceful enjoyment of rights is also the purpose of the punitive norm (p. 50). Feijóo (2005), for his part, in line with Mendoza Buergo (2002), states that, given that in certain areas, such as the one we are dealing with here, dangerous activities are permitted, the normative reference of Kindhäuser's theory is introduced to the “legally guaranteed conditions for the safe disposal of rights in each area or social subsystem” (p. 331).

Thus, as we can see, crimes of danger are also configured here as crimes of result, since the mere endangering of a legal right (in the terms indicated) already implies a crime of result (Mendoza Buergo, 2002). In this sense, the specific harmfulness of the behaviour typified in this type of crime is based on “the undermining of a conception of protection typified through the establishment of safety standards, the existence of which is necessary for a rational disposition of the rights” (Mendoza Buergo, 2002, p. 50). In other words, as this same author clearly indicates, “the abstract danger does not affect the integrity of the right, but rather the possibility of its use without concern”. In this way, this relevant author continues: “whenever the typical behaviour is carried out, the legally guaranteed conditions for the safe disposal of rights are disturbed or undermined” (Mendoza Buergo, 2002, p. 51). Thus, the wrongfulness is exhausted in the mere realisation of the typical elements insofar as, according to Mendoza Buergo (2002, p. 51), they entail a “contradiction with previously established safety patterns of a general nature”. Safety (as a protected legal right) is understood to be automatically harmed by the commission of conduct belonging to a certain class of behaviour previously defined as disruptive (or dangerous) *per se*. Professor Mendoza Buergo (2002) considers that confidence in safety is breached even if “no one is making use of the power to dispose of the legal right in question and even if it does not present characteristics that make it possible to affirm its capacity to effectively affect the safety of a right” (p. 51).

As we can see, Mendoza Buergo (2002, p. 50) attributes to safety a practical nature that materialises in “the objectively founded expectation of a subject, who judges rationally, of being able to use rights in a carefree manner, based on the absence of relevant conditions for injury”. However, the problem is that (in the risk society) expectations of safety never tend to be objective, but rather the opposite (Del Rosal Blasco, 2009). This is perhaps why Professor Mendoza hastens to affirm that “behaviour that is totally devoid of danger is not supported by this idea because it does not affect safety” (p. 52). For this reason, this conception, as Mendoza Buergo (2002, p. 52) also states, “is not in a position to dispense with the concept of dangerousness or harmful relevance of the conduct if it is based on a notion of safety that is not conceived in a formal and subjective way”.

Seen in this other way, this approach presents features that are consistent with the conception of the legal right that we will see below (Jakobs' systemic functionalism) insofar as, as Mendoza Buergo (2002, p. 51) also indicates here, it has a formal and

circular foundation. Ultimately, a breach of safety is identified with the mere non-compliance with the norm.

### 2.5. The validity of the norm as a right to be protected

In recent years, as some authors point out, the theory of the legal right to criminal prosecution has faced a major crisis, since with the criminal reforms undertaken in recent years, as we shall see, it is no longer easy to identify a relevant legal right (García Arroyo, 2022). This was denounced by Rodríguez Devesa (1971, p. 341) more than half a century ago, when he said that “the theory that every crime is the injury or endangerment of a legal right is untenable in the light of positive law, since it is unquestionable that there are numerous types of crime in which the concurrence, and therefore the demonstration, that such injury or endangerment has occurred is not required for the action to be considered punishable”. As a result, the material concept of the legal right gives way to a formal conception based on a radically functionalist perspective. The theory of systemic functionalism, as is well known, holds that the real object of protection is the very validity of the penal norm itself (Jakobs, 1995, p. 56). The function of criminal law, therefore, is to guarantee what Jakobs (1996, p. 15) calls “normative identity”. In other words, according to this thesis, the function of the penal norm is to protect the validity of the norm and not to protect legal rights. In this way, Jakobs replaces the traditional concept of protected legal right with that of *criminal-legal right*, which he defines as “the factual validity of norms, which guarantee that respect for rights, roles and legal peace can be expected”. Therefore, for this author, any harmful result, such as, for example, the causing of a death, does not in itself constitute an injury to a criminal legal right (it is simply an injury to a right), but the opposition to the underlying norm that prohibits or punishes (avoidable) homicide.

In Spain, it seems that this position has not been accepted by the majority of the doctrine, which criticises this functionalist conception under the main argument that it leads to the loss of the material content of the criminal offence in crimes of abstract danger (Mendoza Buergo, 2001; Silva Sánchez, 2001). The clearest example is found, as we will have the opportunity to see, in the offence of leaving the scene of an accident, but also in the offence of refusal or even in the offence of driving without a licence. In this sense, two possibilities are offered for the justification and legitimisation of this type of offence (it is no longer possible to even allude to the theory of presumed danger or danger as a *ratio legis*). The first option leads us to adopt the formalism of Jakobs, for whom, as we already know, the only object of protection to which criminal law aspires is that of the validity of the norm itself. However, the (majority) doctrine considers this position to be unacceptable insofar as it affects the principles and guarantees of a penal system proper to a social state, eliminates the possibility of criticism of criminal law, limits the interpretative and systematising function and implies an unlimited expansion of criminal law (García Arroyo, 2022, pp. 3 et seq.). The other option is to understand that, as we will see below, despite all the above, what is actually protected in these offences are legal rights that have nothing to do with road safety.

## 3. OTHER LEGAL RIGHTS PROTECTED IN ROAD OFFENCES

In this section we will include a brief analysis of recent doctrinal and jurisprudential positions on whether road safety is the legal right (principal or exclusive) in some of the offences that fall under its heading.



### 3.1. Leaving the scene of the accident (Art. 382 bis CC).

The doctrine agrees that it is not at all easy to identify the legal right protected in this offence (Lanzarote Martínez, 2019, p. 6; Sánchez Benítez, 2020; Trapero Barreales, 2019). To this end, we can open up two possible interpretative avenues (or paths).

Firstly, the systematic location of this offence could lead one to think that the legal right is road safety, something that the doctrine, however, categorically denies (Orts Berenguer, 2019, p. 621; Lanzarote Martínez, 2019, p. 9; Sánchez Benítez, 2020). The only possible way to assume that road safety is the object of protection in this offence is that, to the extent that the driver who has caused an accident (and flees) leaves obstacles on the road, such conduct could pose a risk to traffic (Trapero Barreales, 2019, p. 41). However, the effort to classify this offence as a road safety offence is futile, as there is no dogmatic way of accepting such a conjecture. In no case does the criminal type (neither explicitly nor implicitly) demand such a requirement (Lanzarote Martínez, 2019, p. 7). Moreover, as stated in the very preamble of Organic Law 2/2019 of 1 March, we are dealing with a conduct that is “wilful and independent of previous reckless or fortuitous conduct”. In other words, the typical (wilful) conduct is to leave the scene of the accident, and the involvement (reckless or fortuitous) in the accident constitutes an objective element of the type (Trapero Barreales, 2019). Therefore, such a bizarre interpretation would lead us to assume that we are dealing with the conduct foreseen in Art. 385 CC, but in a reckless or even fortuitous modality.

Secondly, we can turn to the reasons that the legislator alludes to in the preamble of the aforementioned law, where he refers to: i) “the intrinsic evil” of those who know that they are leaving behind someone who could be injured or even dead; ii) “the lack of solidarity with the victims”; and iii) “the legitimate expectations” of other road users (pedestrians, cyclists or drivers). In this sense, the legal interests that the legislator suggests protecting, according to different doctrinal positions, are, respectively, a certain morality, the principle of solidarity and, to a greater extent, the administration of justice.

In the first case, as we can see, allusion is made to ethical, moral and even religious or spiritual elements to justify the *ratio legis* of this crime, which, in the words of Lanzarote Martínez (2019, p. 8), would be assuming “a terminology more typical of a judgement of censure from Ethics or Morals than from Law”. And in this sense, what better than to refer to Roxin himself (2006, p. 63) to denounce that, as practically all doctrine also maintains, the criminal protection of moral, religious or ideological norms is incompatible with the conception of a democratic State under the rule of law. De Vicente Martínez (2019) states that this crime “expresses a purely ethical devaluation [...] disconnected from the protection of a legal right, which is the essential mission of the law” (p. 130), which would lead “to the already superseded identification between crime and sin” (p. 131).

In the second case, a sector of doctrine and, above all, of jurisprudence, speaks of the violation of a duty of human solidarity that is raised to the rank of a legal duty (Supreme Court Ruling 167/2022, 24 February). The SC recognises that this offence punishes “indifference to the situation created, failing to comply with the duties imposed by Article 51 of RDL 6/2015”. However, to the extent that solidarity is imposed by law, we can no longer speak of solidarity, but of duty (Bustos Rubio, 2019, p. 6). As Carbonell Mateu (2019, p. 273) points out, “the idea of solidarity is an evanescent concept and cannot be

conceived as a legal obligation, because if a duty of solidarity is imposed, one is acting not out of solidarity but out of submission to the norm”. Moreover, it is not really possible to speak of solidarity (according to the meaning of the term itself), since the criminal offence in no case requires that the victims (or the rest of the road users) are in need of help (Sánchez Benítez, 2020).

Finally, a sector of doctrine, in the light of comparative law, has connected this offence with crimes against the Administration of Justice, or more broadly, with the powers of the Administration and the police to control and investigate traffic accidents (Benítez Ortúzar, 2018, p. 67; De Vicente Martínez, 2019, p. 135; Castro Moreno, 2019, pp.14-1; Sánchez Benítez, 2020; Trapero Barreales, 2019, p. 41). The typical structure of this offence only allows us to assume that the real legal right is the exercise of the powers of the public administration, which translates into ensuring the identification of the driver and clarifying the facts (Sánchez Benítez, 2020). Therefore, we would really be dealing with a crime against the Administration of Justice whose correct location would have been Title XIX of Book II of the Criminal Code (Castro Moreno, 2019, p. 20). However, if the legal right of this offence is configured in this way, it means that such a duty (to remain at the scene of the crime) - which is imposed on a person who could have committed a crime (e.g. against road safety or against the life or physical integrity of persons) - is an exception to the general rule of impunity for self-hiding (Lanzarote Martínez, 2019, p. 7), which, in this sense, may affect relevant constitutional principles (Sánchez Benítez, 2020). In fact, some authors maintain that the systematic placement of this crime among crimes against road safety is intentional, and its aim is precisely to try to overcome the serious problems of unconstitutionality that its placement among crimes against the administration of justice could entail (Sánchez Benítez, 2020).

In short, it is clear that, in this offence, due to its typical configuration, road safety is not protected, nor are other individual legal rights that could be affected. Nor is it possible to assume that wickedness or lack of solidarity is punished. Here, what is punished is mere disobedience to an administrative norm (De Vicente Martínez, 2019). The truth is that, in our opinion, we are dealing with a crime that lacks any protected legal right (beyond the mere infringement of the norm), which is consistent with systemic functionalism which, as we have seen, dispenses with any reference to the legal right and places the legitimacy of the criminal system in the defence of the norm itself.

### 3.2. Refusal (Art. 383 CC)

In this case, part of the doctrine and case law make it clear that the main legal right protected in this offence is not road safety, but the principle of authority (Teijón Alcalá and Cámara Arroyo, 2022). The SC affirms that the legal right directly protected is the principle of authority, as in the offences of disobedience. Road safety is only indirectly protected. For the SC, the substantive content of this infringement does not lie primarily in the protection of road traffic, but in the principle of authority. The SC maintains that the attack on road safety is not a determining factor and, therefore, the refusal of a person who does not show symptoms of being under the influence of drugs or alcoholic beverages is punishable by application of Art. 383 CC. (Supreme Court Ruling 163/2018 of 6 April).

However, as Teijón Alcalá and Cámara Arroyo (2022) point out, to the extent that the law (nor the Supreme Court) does not require the subject who refuses the tests to show



any kind of influence, it cannot be assumed that road safety is being protected, even indirectly or indirectly. The refusal (e.g. in a routine check) of a driver who has not consumed a single gram of alcohol (or of certain substances), according to the high court's own interpretation, already fulfils the requirements of the criminal offence. In these cases, as can easily be seen, there is not the slightest danger to road safety, since the driver who refuses (due to stubbornness or obstinacy) maintains their psychophysical driving abilities intact. Here, the only legal right protected is the principle of authority, which makes this criminal offence a crime of disobedience. In other words, in a formal offence where mere disobedience of the norm is equally punishable.

### 3.3. Driving without a licence (Art. 384 CC)

As is well known, this offence covers three typical forms of driving without a licence: 1. After loss of validity due to total loss of points; 2. After being preventively or definitively deprived by a court decision; 3. Without ever having obtained it. In general, despite the differences that exist in each of these modalities, the typical configuration of each of them leaves serious doubts as to whether the legal right protected is road safety. However, the SC does consider that the legal right protected here is road safety “as an intermediate right directly affected” as well as the life and physical integrity of the subjects “as indirectly or mediately protectable rights that could be harmed by dangerous driving” (Supreme Court Ruling 480/2012, 28 June). However, as in the previous cases, the criminal offence does not require either explicitly or implicitly that road safety - or the individual legal rights referred to by the SC - be affected. Here, the legislator (supported a posteriori by the SC) simply assumes that such conduct, on the basis of its standardisation, is dangerous to the legal right. However, as we have just mentioned, the dangerousness of the behaviour does not play any role in the type of wrongfulness, but is presumed from the action itself because it belongs to a class of conduct considered dangerous in itself. Here, as we see, the presumption is twofold: it is presumed that driving without a licence (in its different typical modalities) affects (or determines) the (in)ability or (in)capacity of the subject to drive (endogenous effect); and that this, in turn, represents, in any case, a danger to road safety (exogenous effect). And all this, despite the fact that in the specific case the driver's conduct is completely without danger to the object of protection, in this case road safety (Mendoza Buergo, 2001).

In cases where the driver drives a vehicle without ever having obtained a driving licence, it is argued that, as they have not (formally) accredited their psychophysical conditions and ability to drive, they would not be able to do so, which could pose a risk to road safety (making the maximum abstraction). However, as Feijóo (2005 p. 320) states, a “driver may be unlicensed, but have experience behind the wheel of a car that makes their driving no more dangerous than that of a licensed driver”. In cases of licence withdrawal (by court sentence or administrative decision), the legislator considers that the offences that have led to the withdrawal of the licence themselves prove the loss of the ability to drive safely, which consequently poses a risk to road safety. This is how the SC understands it when it states that in these cases there is “evidence of dangerous behaviour for road traffic as evidenced by the infringements committed” by the driver (Supreme Court Ruling 480/2012, of 28 June). This is irrespective of whether or not the withdrawal of the licence is actually related to behaviour that is indicative of a lack of skill. Therefore, we cannot assume that the legal right protected in these offences is road safety, since, as Maldonado (2006, p. 30) indicates, the different conducts described in Art. 384 CC include (formally) both cases in which their execution constitutes a real risk

to the legal right - because the driver lacks the skills required for driving - and those cases in which, depending on the specific case (e.g., a driver who maintains his psychophysical capacities and skills intact) this does not happen.

For this reason, the majority doctrine classifies the different typical modalities of driving without a licence as mere offences of disobedience. And this despite the fact that the SC insists that “the wording of the norm does not allow us to speak of a crime of disobedience but of a crime against road safety” (Supreme Court Ruling 480/2012, 28 June). In similar terms, Supreme Court Ruling 803/2013 of 31 October states that “we are not dealing with a crime of disobedience or defiance of an administrative decision, but with a crime against road safety”. In reality, as has already been mentioned *ut supra*, insofar as risk does not constitute a normative element of the offence that needs to be proven in the specific case - as evidenced by the fact that cases in which the driver de facto maintains all the necessary skills to drive are punished - we cannot speak of a crime of endangerment or that the legal right that is the object of protection is road safety.

Therefore, we can conclude this chapter by stating that what the three offences analysed here really have in common is that they are purely formal offences in which the mere disobedience of an administrative norm is punished.

#### 4. CONCLUSIONS

The protection of relevant legal rights is not only historically established as the main and essential mission of criminal law (De Vicente Martínez, 2019, p. 130), thus legitimising criminal intervention in areas such as trafficking, but has also allowed the doctrine to develop its critical work and has been one of the main criteria for the interpretation of the different types of criminal offences (Hefendehl, 2016, pp. 173 et seq.). In this sense, Galán Muñoz (2005, p. 185), considers that only by establishing the concept of the legal right as the basic fundamental reference point for the creation and interpretation of criminal law can we sustain a critical and dynamic conception of criminal law as an instrument of social control, which is what, ultimately, will allow us to speak of a legal system that guarantees in accordance with fundamental principles and rights. For Hefendehl (2007, pp. 173 et seq.) the legal right is the indispensable basis of any rational legal-criminal system, since it allows both the interpretation of the criminal type (intrasystemic function) and the critical function.

However, in recent years, as some authors have warned, the field of road safety has become one of those “sensitive areas” in which, technically speaking, the risk paradigm is penetrating, with the consequent proliferation of criminal offences under the guise of dangerous crimes (Del Rosal Blasco, 2009, p. 33). In the latest legislative reforms (and judicial interpretations) on the matter, especially in the last decade, it has been observed how the legislator has incorporated formal abstract ‘danger’ crimes into the Criminal Code in which, as Del Rosal Blasco (2009) points out, it is extremely “difficult to justify the elementary content of harm, even if presumed, of the behaviour that serves as the basis for the offence” (p. 33). These offences are dominated by the total absence of a material content of wrongdoing. This implies a breach of the traditional principle of exclusive protection of legal rights or the principle of offensiveness (*nullum crimen sine iniuria*) which, as mentioned above, is a requirement for criminal law in a social and democratic state governed by the rule of law (García Arroyo, 2021, p. 3). And it is precisely the condition of social state enshrined in our Constitution that allows us to

advance the barriers of punishment for the protection of collective legal rights, such as road safety, in order to ensure the early protection of individual legal rights that are normally affected in this particular sphere of social activity (Lacruz López, 2017). Consequently, behaviour that is not in any way capable of damaging or endangering relevant legal rights (refusal to drive or driving without a licence) is not justified in this sense because, as we have said, it lacks this element of material wrongdoing. Let alone those other conducts in which moral aspects are punished, or where, directly, a specific legal right does not exist or cannot be defined (crime of escape), which leads us (irremediably) to a criminal model more typical of systemic functionalism. That is to say, a penal system in which the figure of the legal right (as such) is totally dispensed with or where it is drawn with such ambiguous, imprecise and inconsistent contours that it loses all its feature to exercise the aforementioned functions. The criminal offences that we have analysed here, in the sense indicated by Torío López (1981, p. 837), can only be doctrinally configured as crimes of disobedience or, in Binding's sense, as criminalised administrative injustices, or administrative offences subject to criminal law, which implies the administrativisation of criminal law, the loss of its status as an *ultima ratio* and the breakdown of the principles of proportionality and harmfulness that inspire this branch of law (Lanzarote Martínez, 2019, p. 6; Sánchez Benítez, 2020, p. 28; Trapero Barreales, 2019, p. 49).

## 5. BIBLIOGRAPHY

- Abanto Vázquez, M. A. (2006). Acerca de la teoría de bienes jurídicos. *Revista Penal*, 18(3), 1-42.
- Alastuey Dobon, M. C. (2004). *El delito de contaminación ambiental*. Comares.
- Álvarez García, F. J. (1991). Bien jurídico y Constitución. *Cuadernos de Política Criminal*, 43.
- Bacigalupo, E. (1999). *Derecho Penal, Parte General*, (2<sup>nd</sup> ed), Hammurabi.
- Benítez Ortúzar, I. F. (2018). Primeras reflexiones a vuelapluma acerca del delito de abandono del lugar del accidente del artículo 382bis CP. El nuevo delito “de fuga”. *Revista de Derecho, Empresa y Sociedad (REDS)*, (13), 56-70.
- Berdugo Gómez de la Torre, I. (2012). *Viejo y nuevo Derecho penal. Principios y desafíos del Derecho penal de hoy*. Madrid: Iustel.
- Birnbaum, J. (1834). *Über das Enfordernis einer Rechtsverletzung zum Begriff des Vervrechens mit besonderer Rücksicht auf den Begriff der Ehrenkränkung*. Archiv des Criminalrechts Neue Folge, Vol. 15.
- Bricola, F. (1973). *Teoría generale del Reato*. Novissimo Digesto Italiano, XIX.
- Bustos Rubio, M. (2019). Aproximación crítica al nuevo delito de abandono del lugar del accidente (art. 382 bis del Código Penal). *La ley penal: revista de derecho penal, procesal y penitenciario*, (138), 1-18.

- Cabezas Cabezas, C. (2013). El principio de ofensividad y su relación con los delitos de peligro abstracto en la experiencia italiana y chilena: un breve estudio comparado. *Revista de derecho (Coquimbo)*, 20(2), 85-120.
- Carbonell Mateu, J. C. (2019). *Lección XIV. Omisión del deber de socorro*. En J. L. González Cussac (Coord.), *Derecho penal parte especial* (6<sup>th</sup> ed), Valencia: Tirant lo Blanch.
- Caro Coria, D. (1997). On the modern theory of the legal right in Spain and the rejection of Jakobs' systemic functionalism. *THEMIS Revista de Derecho*, (35), 137-168.
- Castro Moreno, A. (2019). Comentario crítico a la LO 2/2019, de 1 de marzo, de reforma del Código penal, en materia de imprudencia en la conducción de vehículos a motor y ciclomotores: nuevo delito de abandono del lugar del accidente, *La Ley Penal*, 138.
- Cerezo Mir, J. (2002). Los delitos de peligro abstracto en el ámbito del Derecho Penal del riesgo. *Revista de Derecho Penal y Criminología*, 2<sup>a</sup> Época, 10(2002), 47-72.
- Corcoy Bidasolo, M. (1999). *Delitos de peligro y protección de bienes jurídico-penales supraindividuales: nuevas formas de delincuencia y reinterpretación de tipos penales clásicos*. Tirant lo Blanch.
- De Vicente Martínez, R. (2019). *Siniestralidad vial, delitos imprudentes y fuga*. Madrid. Reus.
- Del Rosal Blasco B. (2009). ¿Hacia el Derecho Penal de la postmodernidad? *Revista Electrónica de Ciencia Penal y Criminología*, 11-08 (2009), 1-64.
- Doval País, A. (1994). Estructura de las conductas típicas con especial referencia a los fraudes alimentarios. *Cuadernos de Derecho judicial. Intereses difusos y derecho penal*, 23-72.
- Escrivá Gregori, J. M. (1980). Algunas consideraciones sobre Derecho penal y Constitución. *Papers: revista de sociología*, (13), 141-163.
- Feijóo Sánchez, B. J. (2000). *Cuestiones básicas de los delitos de peligro abstracto y concreto en relación con el tránsito*, Ajuris.
- Feijóo Sánchez, B. J. (2005). *Seguridad colectiva y peligro abstracto. Sobre la normativización del peligro*. Homenaje al profesor Dr. Gonzalo Rodríguez Mourullo, 307-342, Civitas.
- Galán Muñoz, A. (2005). *El fraude y la estafa mediante sistemas informáticos. Análisis del artículo 248.2 C.P.* Valencia: Tirant Lo Blanch.
- García Arroyo, C. (2022). On the concept of legal right. Especial consideración de los bienes jurídicos supraindividuales-institucionales. *Revista electrónica de ciencia penal y criminología*, (24), 12.

- González Rus, J. J. (1983). *The legal right and the Constitution (Basis for a theory)*. Madrid: Serie Universitaria 201.
- Hegel, G. (1999). *Principios de la filosofía del Derecho*, 2<sup>nd</sup> ed, Barcelona: Edhasa.
- Hefendehl, R. (2001). ¿Debe ocuparse el Derecho Penal de riesgos futuros? Bienes jurídicos colectivos y delitos de peligro abstracto. *Anuales de Derecho*, 19, 147-158.
- Hefendehl, R. (2016). *El bien jurídico como eje material de la norma penal*. In R. Alcácer Guijarro, M. Martín Lorenzo e I. Ortiz de Urbina Gimeno (coords.). *La Teoría del bien jurídico: ¿Fundamento de legitimación del Derecho penal o juego de abalorios dogmático?*, 173-190. Marcial Pons.
- Jakobs, G. (1995). *Derecho Penal–Parte General. Fundamentos y Teoría de la Imputación*. Madrid: Marcial Pons.
- Jakobs, G. (1996). *Sociedad, norma y persona en una teoría de un Derecho penal funcional*, Bogota. Colombia: Universidad del Externado de Colombia
- Jakobs, G. (2000). *La Ciencia del Derecho Penal ante las exigencias del presente*. Cuadernos de Conferencias y Artículos. Bogota. Colombia: Universidad del Externado de Colombia.
- Jescheck, H. (1981). *Tratado de Derecho penal. Parte general. Volumen primero*, Barcelona: Instituto. Pacífico
- Kindhäuser, U. (2009). Estructura y legitimación de los delitos de peligro del Derecho penal. *InDret*, 1, 1-19.
- Lacruz López, A. (2015). *Los bienes jurídicos como sistema de protección penal*. In Sistema de responsabilidad penal, 9-15, Madrid: Dykinson
- Lanzarote Martínez, P. A. (2019). El nuevo delito de abandono del lugar del accidente y otras importantes novedades de la inminente reforma del Código Penal en materia de imprudencia. *Diario La Ley*, (9359), 3.
- Maldonado, F. (2006). Reflexión sobre las técnicas de tipificación de los llamados "delitos de peligro" en el moderno derecho penal. *Revista de Estudios de la Justicia*, (7), 23-63.
- Mañalich, J. P. (2021). Peligro concreto y peligro abstracto. Una contribución a la teoría general de la parte especial del derecho penal. *Revista chilena de derecho*, 48(2), 79-100.
- Mendoza Buergo, B. (2002). La configuración del injusto (objetivo) de los delitos de peligro abstracto. *Revista de Derecho Penal y Criminología*, 2<sup>a</sup> Época, 9, 39-82.
- Octavio de Toledo, E. (1990). Función y límites del principio de exclusiva protección de bienes jurídicos. *Anuario de derecho penal y ciencias penales*, 43(1), 5-28.



- Orts Berenguer, E. (2019). *Delitos contra la seguridad colectiva (y III): Delitos contra la seguridad vial*. In J. L. González Cussac, (Coord.), *Derecho penal parte especial* (6<sup>th</sup> ed.), Valencia: Tirant lo Blanch.
- Pérez-Sauquillo Muñoz, C. (2019). *Legitimidad y técnicas de protección penal de bienes jurídicos supraindividuales*. Valencia: Tirant lo Blanch.
- Rodríguez Devesa, J. M. (1971). *Derecho penal español. Parte general* (2<sup>nd</sup> ed.). Dykinson.
- Rodríguez Montañés, T. (1994). *Delitos de peligro, dolo e imprudencia*. Universidad Complutense.
- Rodríguez Mourullo, G. (1966). *La omisión de socorro en el Código Penal*. Tecnos
- Roxin, C. (2016), *¿Es la protección de bienes jurídicos una finalidad del Derecho penal?* In Hefendehl, von Hirsch, Wohler (eds.), Spanish edition edited by Alcacer Guirao, Martín Lorenzo, Ortiz de Urbina Gimeno, *La teoría del bien jurídico, ¿Fundamento de legitimación del Derecho penal o juego de abalorios dogmático?*, Madrid: Marcial Pons.
- Roxin, C. (2008). *Derecho Penal, Parte General, Tomo I, Fundamentos. La estructura del delito* (Trad. Luzón Peña, Díaz y García Conlledo and De Vicente Remesal), Madrid: Aranzadi.
- Sánchez Benítez, C. (2020). Análisis crítico del delito de abandono del lugar del accidente (artículo 382 bis del Código penal español). *Revista de derecho y proceso penal*, (58), 117-138.
- Silva Sánchez, J. M. (2001). *La expansión del Derecho penal. Aspectos de la política criminal en las sociedades postindustriales* (2<sup>nd</sup> ed.), Civitas.
- Silva Sánchez, J. (2012). *Aproximación al Derecho penal contemporáneo*, 3<sup>rd</sup> ed., Montevideo - Buenos Aires: Editorial B de f
- Schmidt, J. (1999). *Untersuchung zur Dogmatik und zum Abstraktionsgrad abstrakter Gefährdungsdelikte*, Marburgo: Elwert, N G.
- Teijón Alcalá, M., and Cámara Arroyo, S. (2022). *La negativa a someterse a las pruebas de alcohol y drogas. Un análisis de las cuestiones más controvertidas*. Anuario de derecho penal y ciencias penales, Vol. LXXV(MMXXII), 205-302.
- Terradillos Basoco, J. M. (2001). *Peligro abstracto y garantías penales*. In F. Morales Prats and G. Quintero Olivares (coords.), *El nuevo derecho penal español: estudios penales en memoria del profesor José Manuel Valle Muñiz*, 787-816. Aranzadi.
- Torío Lopez, A. (1981). *Los delitos del peligro hipotético*. Anuario de derecho penal y ciencias penales, 34(2-3), 825-848.

Trapero Barreales, M. A. (2019). Comentario urgente sobre la reforma penal vial y otros aspectos controvertidos. *Revista Electrónica de Ciencia Penal y Criminología*, 21-11, 1-61.

Von Liszt, F. (1925). *Tratado de Derecho Penal*, vol. II, 3<sup>rd</sup> ed: Reus.







### III.- REVIEW OF CASE LAW





**Javier Ignacio Reyes López**  
Magistrate of Instruction Court number 1  
of Alcalá de Henares

**REVIEW OF CASE LAW 2TH CHAMBER OF  
THE SUPREME COURT**



## REVIEW OF CASE LAW 2TH CHAMBER OF THE SUPREME COURT

**Summary:** 1. Supreme Court Ruling 653/2023, of 20 September 2023. Attempted murder. Civil Guard officers injured. Difference between *animus necandi* and *leadendi*. 2. Supreme Court Ruling 685/2023, of September 2023. Perpetration of and complicity in crimes against public health. Completion and attempt. 3. Supreme Court Ruling 648/2023, of 27 July 2023. Dissemination of child pornography with particularly degrading facts. 4. Supreme Court Ruling 614/2023, of 14 July. Validity of direct police surveillance and the use of photographs in private spaces. 5. Supreme Court Ruling 576/2023, of 10 July. Police intervention without a qualified interpreter for emergency reasons. Evidentiary validity. 6. Supreme Court Ruling 628/2023, of 19 July. Damage caused by graffiti on a railway. 7. STS 693/2023, of 27 September. Offence of disclosure of secrets. Disclosure of images without the victim's consent. 8. Supreme Court Ruling 647/2023, of 27 July. Offence against sexual indemnity committed by a physiotherapist. Interpretation of the victim's consent. Effectiveness of reporting and willingness to report. 9. Supreme Court Ruling 624/2023 of 18 July 2023. Thwarted malice aforethought and cohabitative malice aforethought. 10. Constitutional Court Ruling 92/2023, of 11 September. Police capture of images in communal garages without judicial authorisation. 11. Supreme Court Ruling 750/2023, of 11 October. Cultivation of marijuana. Forms of participation. Commission by omission does not apply. 12. Constitutional Court Ruling 68/2023 of 19 June. Infringement of the right of the person under investigation to information on the facts with which he is charged and access to the proceedings, as statements of the right of defence, when the case is under investigation secrecy.

### 1. Supreme Court Ruling 653/2023 of 20 September 2023. Attempted murder. Civil Guard officers injured. Difference between *animus necandi* and *leadendi*<sup>1</sup>.

Factual background.

The Court of First Instance and Preliminary Investigation of Calamocha, instructed a criminal case that was subsequently referred to the Single Section of the Provincial Court of Teruel, Ordinary Summary Proceedings no. 211/2021 against Jaime, for two crimes of attempted murder, two crimes of robbery with force, two crimes of theft of use of a motor vehicle, a crime of coercion and another against traffic safety.

In the part that interests us and to which we are referring, concerning the shots fired by the Civil Guard officers who were following the accused, it is proven that the accused was at the top of the slope that forms an alleyway, in a situation of superiority over the officers who were in a lower position, a few metres away from him. They saw him manipulating an object that he had placed on the front seat of his vehicle. The officer got out of the passenger seat and when the officer driving the police vehicle got out with one leg out and half of his body inside the vehicle, the accused got out of the vehicle next to him and immediately pointed a gun at the latter's head, fired a shot and raised his

---

<sup>1</sup> This Supreme Court ruling has been published in the database of the Judicial Documentation Centre, CENDOJ. ROJ: STS 3630/2023 - ECLI:ES:TS:2023:3630. Body: Supreme Court. Criminal Chamber. Seat: Madrid. Section: 1. Appeal No.: 10653/2022. Resolution No.: 653/2023. Date of Resolution: 20 September 2023. Procedure: Criminal appeal. Rapporteur H. E. Mr Andrés Martínez Arrieta.

weapon, the shot did not reach the officer due to the trajectory of the bullet and the fact that he had fled, although it was fired with disregard and disrespect for the life and physical integrity of the officer and the authority he represented. In response, Officer NUM000 fired his service weapon at the accused without hitting him. The officer attempted to fire a second shot, but his weapon jammed. The assailant then moved from the back of the police vehicle, taking cover in the door of the vehicle, managed to get within two and a half metres of him and fired another shot, which struck the officer as he stood facing his assailant.

As a result of the shooting, Officer NUM000 suffered a gunshot wound to the forearm and abdomen with a comminuted fracture of the ulna and radius, paralysis of the posterior interosseous nerve and a subsequent diagnosis of acute stress. The wounds were life-threatening, requiring urgent treatment, multiple surgical operations, hospitalisation, intensive care and subsequent prolonged rehabilitation, with both physical and psychological sequelae.

### Legal grounds

The appeal submitted by the representative of the convicted person is developed in barely half a page, in which he confines himself to stating the grounds of appeal, without expressing a minimum of development that would allow him to question the contested ruling, which, it must be remembered, is the ruling of the Supreme Court, which, on appeal, confirmed the conviction for the above-mentioned offences, and in which the proven facts are included in the factual expression for their subsumption in the grounds of the ruling.

The first ground of appeal merely states that Article 852 of the Criminal Procedure Act has been infringed due to “the lack of a statement of reasons in the ruling under appeal”, without specifying which ruling it refers to, since our task on appeal is to examine the subject of the appeal, which is none other than the ruling under appeal. In any case, both the ruling of the first instance and the ruling of the appeal contain the precise reasoning on the assessment of the evidence that made it possible to establish the proven fact and the legal subsumption of the various offences that were the subject of the conviction. An appeal in cassation may not be challenged on the sole ground of inadequate reasoning. The reason for the appeal cannot be understood.

The second ground of appeal alleges error of law on the grounds of misapplication of Article 138 of the Criminal Code instead of applying Article 147 of the Criminal Code. It takes the view, and this is reflected in its sole argument, that the appropriate subsumption is Article 147 of the Criminal Code, the offence of causing bodily harm. The ground of appeal is unfounded and should have been rejected, given that the grounds of the ruling of the High Court of Justice of Aragon include the reasoning on the intention to kill, based on the case-law of this Court on the criteria for distinguishing *animus necandi* from *animus laedendi*, based on the weapon used in the act; the manipulations carried out on the weapon itself, which distort the ejection of the ammunition; the distance from which the shots were fired, two and a half metres; and the reason why the first shot did not reach the victim in the case of one of the officers and in the case of the second officer against whom the shot was directed when he was hiding behind the door of the police vehicle, and at a distance of two metres, suffering injuries to his arm and abdomen,



which required numerous surgical interventions and which have required a year of basic personal injury for the stabilisation of his wounds.

In its ruling, the High Court of Justice found that there was a concurrence of intent to kill, based on the use of a lethal weapon, modified in its physical configuration to increase its capacity to cause death, and the firing of two consecutive shots in the direction of the officers, hitting one of them in the arm and abdomen. The court justifies the existence of a precise intent to kill with an argument that is not contested on appeal.

### Conclusions.

This decision of the Supreme Court is remarkable for the meticulousness with which it describes the situation in which two Civil Guard officers were involved in an attempt to arrest a dangerous criminal, who was finally subdued after shots were fired by other officers to prevent his escape.

It is also surprising because of the criticism of the way in which the appeal for cassation was formalised by the convicted's defence, which, according to him, should not have been accepted for processing.

Finally, with the support of objective elements presented by the officers in the police report, the distinction is made between the intention to kill and the intention to injure, with very different parameters of recognition and legal consequences.

## **2. Supreme Court Ruling No. 685/2023 of September 2023. Perpetration of and complicity in crimes against public health. Completion and attempt<sup>2</sup>.**

### Factual background

The Court of Preliminary Investigation No. 1 of Cangas, instructed the preliminary proceedings No. 718/2019, for crimes against public health and once the oral trial was opened, referred it to the Second Section of the Provincial Court of Pontevedra, in Ordinary Summary Proceedings No. 72/2020, which issued sentence No. 18/2022, dated 26 January 2022, which contains the following proven facts: "Calixto, Cayetano and Celestino, whose personal circumstances are already known and who have no previous criminal records, acted at the service of an international criminal structure for the supply of drugs, between September and November 2019, to transport a consignment of cocaine by sea from Brazil to Spain, using a semi-submersible vessel of which they were members of the crew and from which they were to take aliquots of the drugs. This consignment of cocaine transported in the semi-submersible vessel consisted of 152 bundles containing 3030 packages of the same substance, with a net weight of 3047.907 kilograms and a purity of 80.35%, and another bundle containing 20 packages of cocaine, also with a net weight of 20.148 kilograms and a purity of 79.32%. This totalled 3068.055 kilograms of cocaine, with an estimated street value of 123,244,573 euros. The accused Ángel, Augusto, Pedro Jesús and Alexander actively collaborated with the accused Celestino in

---

<sup>2</sup> This Supreme Court ruling has been published in the database of the Judicial Documentation Centre, CENDOJ. Supreme Court Ruling of 21 September 2023 - ROJ: STS 3637/2023. ECLI:ES:TS:2023:3637. Criminal Chamber. Resolution No.: 685/2023. Appeal No.: 10287/2023. Section: 1. Rapporteur H. E. Ms Susana Polo García.

bringing this consignment of cocaine to the province of Pontevedra, knowing that it was approaching the Galician coast on board the vessel carrying the consignment and knowing its purpose, which they shared. The accused, Ángel and Augusto, while still in their respective cities of residence - Palma and Lleida - contacted each other to see if they had a lorry, an off-road vehicle or something similar with which they could unload the cargo brought by the boat in which Celestino was sailing. To this end, Augusto called Pelayo, an acquaintance, but the call was not successful...

Initially, the AP sentenced all the accused as perpetrators of an offence against public health in the modality of substances causing serious damage to health, consumed, and with several aggravating circumstances, to sentences that for Pedro Jesús and Alexander amounted to around seven years in prison and a very heavy fine.

On appeal against the sentence imposed by the AP, the SCJ upheld the appeals of the defence and convicted Pedro Jesús as a perpetrator of an offence against public health in the category of substances that do not cause serious damage to health, for the hashish found in his home, not for the cocaine stockpile, and acquitted Alexander.

### Legal grounds

Let us focus on the appeal that analyses the conduct of the accused, Alexander and Pedro Jesús.

It is difficult to see how any action aimed at bringing narcotic substances to the consumer could not be subsumed under one of the core verbs of "promoting", "facilitating" or "favouring" the illegal consumption of toxic substances, as provided for in the offence, the Court having understood that, even without material possession of the drug, actions may be carried out to facilitate the aforementioned consumption.

From the above description of the facts, it is undoubtedly clear, with regard to the accused Alexander, that the conduct he carried out is typical, we are dealing with the facilitation of a drug trafficking offence, since the Court of First Instance forgets that the accused's activity consisted not only in delivering what the other accused had bought, but also in parking the vehicle with the drugs, but that he parked the vehicle with the lights on, as Angel had instructed him to do at the request of Celestino, who told him that he was nearby and that he should flash the lights so that he could find his way at night, after sinking the boat to hide it and secure the cocaine shipment with the intention of disposing of it later, and to get hold of the bags.

On the other hand, in relation to Pedro Jesús, although in conversations with his son he tells him that he does not want to go to the place, he accepts, with knowledge of what he was doing, to take to Alexander, as his son asked him to do, all the items that they had bought in Decathlon City, Ángel and Augusto, for the crew members of the semi-submersible boat, an act that, although it does not fit into authorship, does fit into complicity. As we said in our ruling 478/2020 of 28 September, the jurisprudence of this Court has highlighted the difficulty of assessing complicity in the offence of drug trafficking under Article 368 of the Criminal Code, given the breadth with which the offence is described, in which a broad concept of perpetrator is practically used. In this way, complicity is reduced to cases of second-order contribution, which are not included in any of the forms of behaviour described in Article 368, and are generally included in

the cases of what has been called “favouring the facilitator”, which refers to behaviour that, without directly promoting, favouring or facilitating illegal consumption, helps the person who carries out the actual typical acts referred to in the aforementioned Article 368 (Supreme Court Rulings no. 93/2005, of 31-1; 115/010, of 18-2; 473/2010, of 27-4; 1115/2011, of 17-11; and 207/2012, of 12-3).

Thus, with regard to complicity in the strict sense of the term, the Court has opted, in cases of minimal assistance in acts related to drug trafficking, which are included in the graphic expression of "favouring the facilitator", to admit cases of cooperation of little relevance, such as, for example, the possession of the drug kept for another on an occasional basis and for a momentary or almost momentary duration, or the fact of simply indicating the place where the drug is to be sold, or simply accompanying the person to that place (Supreme Court Ruling 1276/2009, 21-12).

Consequently, given the broad concept of perpetrator mentioned above, Alexander's conduct must be classified as such, and Pedro Jesús's conduct as an accessory to an attempted offence, since, as we have said, according to the jurisprudence, the assessment of an attempt requires that one has not participated in the operations prior to the transport or had actual access to the drugs. This is therefore the case of the person or persons who, unconnected with the initial agreement to transport, later intervene through a clearly differentiated activity, which is what happens in the present case.

The jurisprudence confirms that, in the case of crimes committed by means of the long-distance transport of drugs, persons who arrive to collaborate or carry out their criminal activity after the drug has already been transported, and who therefore do not take part in any agreement prior to the transport, cannot be considered as perpetrators of a consummated crime if they neither contribute to the acts of transport nor subsequently dispose of the narcotic substance”. (Supreme Court Rulings 774/2022, of 21 September, citing Ruling 313/2017 of 3 May 2017).

We consider that the facts constitute a crime against public health in the degree of attempt, not completed, because there is no evidence that the accused participated in the acquisition and transfer of the drug in a boat, it was not addressed to them, nor did they have the slightest disposition of the narcotic substance.

### Conclusions.

A dangerous path has been opened by the SC in this ruling, since the rigorous condemnation of the AP is neutralised by that of the SCJ, which upholds the appeal of the defence and modifies the proven facts. Not only that, the Supreme Court Ruling is a far cry from the first sentence handed down by the AP, in that it not only distinguishes with some difficulty and more rhetorically than correctly between perpetration and complicity, but also overly broadens the interpretation of attempt in crimes against public health, which leads to an extremely derisory sentence for the last link in this criminal organisation, with sentences ranging from nine months to a year and a half in prison.

### **3. Supreme Court Ruling No. 648/2023 of 27 July 2023. Dissemination of child pornography with particularly degrading facts<sup>3</sup>.**

#### Factual background

The Court of Preliminary Investigation No. 3 of Valladolid initiated Preliminary Investigations (AP No. 1584/2016) against Jesús María. Once concluded, it referred them to the Fourth Section of the Provincial Court of Valladolid, which issued a ruling on 29 March 2021, in which the following facts were established: “ONE. The accused, Jesús María, who is of legal age and has no criminal record, from at least 1 January 2016 and until 14 November 2016, knowingly downloaded and shared photo and video files containing explicit child pornography of minors up to 14 years of age, using the peer-to-peer (P2P) file-sharing program eMule, through the ADDRESS000 and ADDRESS001 networks, using the telephone line NUM000, associated with IP NUM001, installed at his home address at CALLE000, No. NUM002, in ADDRESS002 (Valladolid), with connection login ADDRESS003. TWO. Given that up to 95 downloads were detected, an entry and search warrant was requested and authorised by the order of the Court of Preliminary Investigation No. 3 of Valladolid dated 7 November 2016, in which several hard disks were seized, two of them corresponding to the computers used and several pen drives...

#### Legal grounds

Our jurisprudence has evolved from the understanding that the mere use of a program of this class 2P2 presupposes, at the level of the user, the knowledge that the distribution to third parties of all the downloaded material stored in the aforementioned folders is facilitated, to the finding that this subjective element cannot be presumed on the basis of this single piece of information, which means that, in each case, it will be necessary to expressly assess the evidence that accredits such knowledge. To this end, we have stated that, as far as malice is concerned, it is sufficient that it is possible, i.e. that the agent acts with the foreseeable knowledge that the use of the program allows third parties to access the material thus obtained (Supreme Court Ruling 680/2010). However, we have also pointed out that it is not correct to infer such knowledge from the mere use of the program, but that it is necessary to establish its existence in each case on the basis of an analysis of the proven circumstances. In this sense, the non-jurisdictional plenary session of the Second Chamber, held on 27 October 2009, agreed that: “the existence of the objective offence of facilitating the dissemination of child pornography in Article 189.1.b) CC having been established, as for the subjective offence, the verification of the existence of intent must be carried out without falling into automatism derived from the mere use of the program”. This agreement was later included in some rulings such as Supreme Court Ruling 340/2010.

It is clear, therefore, that proving malice requires more than proof of the mere use of the program. In this regard, this Court has pointed out that the number of elements that are placed on the network at the disposal of third parties must be taken into account, for

---

<sup>3</sup> This Supreme Court ruling has been published in the database of the Judicial Documentation Centre, CENDOJ. Supreme Court Ruling of 27 July 2023 - ROJ: STS 3550/2023. ECLI:ES:TS:2023:3550. Criminal Chamber. Resolution No.: 648/2023. Appeal No.: 4819/2021. Section: 1. Rapporteur H. E. Mr Antonio del Moral García.

which purpose the structure found on the terminal, files stored on the hard disk or disks, or other storage devices, and the number of times they are shared, since this parameter leaves a trace in the computer system, the receipt by other users of such images or videos as coming from the perpetrator's terminal, will be taken into consideration. And whatever external circumstances are determined to reach the conviction that the perpetrator is aware of their activity of facilitating the dissemination of child pornography, among which the degree of knowledge of the use of computer systems that the perpetrator has (Supreme Court Ruling 340/2010) will be taken into account".

We have already said that the statements made by the accused and his professional knowledge cast no doubt on the possibility of malice, at least not as an eventuality.

### Conclusions.

This Supreme Court Ruling incorporates an interesting nuance, citing a uniform, established and consolidated line of jurisprudence, whereby the mere use of file sharing programs such as 2P2 should not automatically be classified as dissemination, if there is no reliable proof of that knowledge and of the will to do so.

#### **4. Supreme Court Ruling 614/2023, of 14 July. Validity of direct police surveillance and the use of photographs in private spaces<sup>4</sup>.**

##### Factual background.

The Court of Preliminary Investigation number 6 of Castellón opened preliminary proceedings of abbreviated procedure 644/2019 for crimes against public health, against several people and once the opening of the oral trial was decreed, it was sent for trial to the Provincial Court of Castellón, Second Section, with a sentence being handed down on 8 July 2021 containing the following proven facts: "SOLE. As a result of the investigations carried out by officers of the National Police Force of the Castellón Police Station, UDYCO Group, it came to light that, at least since March 2019, the home located in the ADDRESS000 area, specifically at ADDRESS001 NUM000 in the town of Grao de Castellón, was a point of sale of narcotic substances by its residents, the accused Severino, of legal age and with a criminal record not computable for the purpose of recidivism, Zaida, presumed sister of the former, of legal age and with a criminal record that could be cancelled, Adelina, the former's partner, of legal age and without a criminal record, and Victorino, of legal age and with a criminal record not computable for the purpose of recidivism, and surveillance was carried out in the place which corroborated these extremes...

##### Legal grounds

In a first appeal, which is poorly structured, in that the grounds of appeal are not clearly separated, two separate grounds of appeal are put forward. In the first of these, citing

---

<sup>4</sup> This Supreme Court ruling has been published in the database of the Judicial Documentation Centre, CENDOJ. Supreme Court Ruling of 14 July 2023 - ROJ: STS 3487/2023. ECLI:ES:TS:2023:3487. Criminal Chamber. Resolution No.: 614/2023. Appeal No.: 6438/2021. Section: 1. Rapporteur H. E. Mr Eduardo de Porres Ortiz de Urbina.



Article 588 quinquies a) of the Lecrim, the nullity of both the photographs taken by the police of the garden of the appellant's home and the police surveillance of that garden, which did not have the required judicial authorisation, is asserted. In the appellant's view, the interference with the home can be physical or virtual, and the latter occurs when there is clandestine observation of what goes on inside the home. In the second, he maintains that the nullity of the images obtained and the surveillance carried out in the home should be extended to the evidence derived from them, although the brief in the appeal does not specify what this reflected or derived evidence might be. Article 18.2 EC stipulates that the home is inviolable and that no entry or search may be made without the consent of the owner or without judicial authorisation and in Constitutional Court Ruling 22/1984, of 17 February, it was specified that "this precept contains two different rules: one has a generic or principal character, while the other is a concrete application of the first, and its content is therefore more reduced. Rule 1 defines the inviolability of the home, which constitutes an authentic fundamental right of the individual, established, as we have said, to guarantee the individual's sphere of privacy, within the limited space chosen by the individual themselves and which must be characterised precisely by being exempt or immune from outside invasion or aggression, from other people or from the public authority. As has been rightly said, the inviolable home is a space in which the individual lives without necessarily being subject to social customs and conventions and exercises their most intimate freedom. Therefore, through this right, it is not only the physical space itself that is the object of protection, but also the emanation and private sphere of the individual. Interpreted in this sense, the rule of the inviolability of the home is broad in content and imposes an extensive series of guarantees and powers, which include prohibiting all kinds of invasions, including those which can be carried out without direct penetration by means of mechanical, electronic or other similar devices".

On the basis of this constitutional doctrine, the appeal ruling, that of the TSJ, applying Article 588 quinquies a) of the Lecrim, declared the nullity of the photographs obtained by the police of the garden of the home of the investigated persons. The aforementioned precept authorises police officers to capture and record images of the person under investigation "when they are in a public place or space" and the garden of the home is not considered as such but as an annexe of the home itself, protected from external invasion or interference.

The contested ruling provides an answer to a question that is susceptible to many nuances, depending on the specific action to be analysed, but, in accordance with the precept just cited and as a general rule, the recording of images from the outside in a home that, as in this case, was protected from the outside by a fence, judicial authorisation is required, because constitutional rights such as the privacy of the home and one's own image may be affected, all without prejudice to exceptional situations which are not relevant to analyse at this point, because the declaration of nullity of the contested ruling has not been challenged by any of the parties.

What is sought, however, is for the nullity to be extended to the police surveillance carried out on the same premises, a claim with which we do not identify.

In the Supreme Court Ruling 329/2016, of 20 April, we argued that "no fundamental right is infringed by the agent who perceives with their eyes what is within the reach of anyone. The police officer can narrate as a witness what they saw and observed while carrying out surveillance and monitoring duties. Our constitutional

system does not raise any obstacle to carrying out observations and monitoring in public premises as part of a criminal investigation. In the opinion of the Chamber, however, the scope of the constitutional protection afforded by Art. 18.2 of the EC can only be properly determined on the basis of the idea that the act of interference in the home can be of a physical or virtual nature. In effect, the constitutional protection of the right proclaimed in Art. 18(2) of the EC protects against both the unwitting intrusion of the intruder into the domestic scene, and against the clandestine observation of what is happening inside, if it is necessary to use a technical device for recording or approximating images for this purpose. The State cannot enter without judicial authorisation into the space of exclusion that each citizen draws vis-à-vis third parties. Art. 18.2 of the EC prohibits it, and this prohibition is violated when, without judicial authorisation and in order to circumvent the obstacles inherent to the task of inspection, an optical device is used to magnify the images and bridge the distance between the observer and the observed".

The 329/2016 ruling just cited mentions two precedents of this Chamber that illustrate our criterion. The Supreme Court Ruling of 15 April 1997 (rec. 397/1996), in response to a case with significant similarities to the one in question, stated that "... as to whether observation through a window requires judicial authorisation, the Court considers that the answer must also be negative. Indeed, in principle, judicial authorisation will always be necessary when it is essential to overcome an obstacle that has been predisposed to safeguard privacy. When, on the contrary, such an obstacle does not exist, as in the case of a window that allows a view of the life that goes on inside a home, there is no need for judicial authorisation to see what the owner of the home does not wish to hide from others..."

And in Supreme Court Ruling of 18 February 1999 (rec. 17/1998) it was reasoned as follows: "... in the present case it is a courtyard that can be seen directly from the outside, according to the ruling under appeal, and which, even though it is considered to be a home in its own right, is permanently exposed to the public. In these circumstances, and in accordance with the above, we cannot share the Court's opinion that there has been a violation of the right to inviolability of the accused's home or of her intimacy or privacy. The police officers who directly viewed the repeated courtyard and observed those who were in it coming from the street were doing no more than what anyone could do; they were contemplating and looking at what anyone could look at and observe in the absence of obstacles that would disturb, impede or - quite simply - hinder the curiosity of others. There has therefore been no infringement of privacy or intimacy and, as such, the evidence obtained from these observations is perfectly lawful and valid from a constitutional perspective".

Finally, we consider that the police surveillance is not vitiated by the alleged invalidity.

### Conclusions.

The principle of nullity of evidence obtained directly or indirectly in violation of fundamental rights, which is known as the theory of the fruit of the poisonous tree, is very extensive and has been subject to various restrictions in order to place it in a reasonable dimension and one of these restrictions is the so-called inevitable discovery exception which excludes the nullity of reflexive evidence when the circumstances would have led to the practice of the same.



Inevitable discovery is a refined formulation or assumption of the theory of independent evidence and was also formulated for the first time in American jurisprudence in the case (Nix vs Williams-1984) and has been applied by the SC on numerous occasions. An example of this was Supreme Court Ruling 974/1997, of 4 July, which rejected a petition for the nullity of a drug seizure, which was preceded by an insufficiently motivated telephone interception, because, apart from the interception and before it, the accused was the object of surveillance and monitoring that would also have led to the discovery of the meeting in which the delivery of the stash took place.

Thus, the capture of images by the use of any technical means by the police inside a home or in one of its annexes, such as a courtyard, would require judicial authorisation, because Art. 588 quinquies a) of the Lecrim only foresees the possible capture of images by the police without judicial authorisation, if it is a question of public spaces. The Lecrim does not foresee the capture of images in private spaces as an independent technological measure, but overlaps with sound recording. Once the evidence obtained through the use of these devices has been eliminated, the observation carried out directly by the agents is fully valid.

This decision by the SC gives me food for thought in the realm of conjecture, chimeras and hypotheses, on another technological measure such as beaconing and with regard to the nullity of the geolocation of a motor vehicle and the validity of the monitoring of the operation carried out on the same car and its occupants. With surgical precision, the first line of investigation could be eliminated if it were null and void and the other maintained for incriminating purposes.

### **5. Supreme Court Ruling 576/2023, of 10 July. Police intervention without a qualified interpreter for emergency reasons. Evidentiary validity.<sup>5</sup>**

#### Factual background

The Court of Preliminary Investigation number 14 of Barcelona opened preliminary proceedings number 209/2018, for crimes against public health, against Secundino and Serafín, which, once the opening of the oral trial was decreed, was sent for trial to the Provincial Court of Barcelona, Ninth Section, which issued a sentence on 13/01/2020 with the following account of proven facts: "SOLE: It is proved and thus expressly declared that Secundino, of legal age, of Pakistani nationality, previously mentioned, with no criminal record, and Serafin, of legal age, of Indian nationality, previously mentioned, and with no criminal record, who between the days to be stated below, resided in the house located at CALLE000, NUM000, in Barcelona, which they used for the sale and distribution of narcotic substances to third parties in exchange for money. The accused recruited buyers in the tourist areas of the city of Barcelona, to whom they offered the purchase of all types of narcotic substances, such as marijuana, MDMA, heroin or cocaine in exchange for money. Once they accepted the exchange, the buyers were accompanied

---

<sup>5</sup> This Supreme Court ruling has been published in the database of the Judicial Documentation Centre, CENDOJ. Supreme Court Ruling of 10 July 2023 - ROJ: STS 3080/2023. ECLI:ES:TS:2023:3080. Criminal Chamber. Resolution No.: 576/2023. Appeal No.: 5091/2021. Section: 1. Rapporteur H. E. Mr Eduardo de Porres Ortiz de Urbina.

to the aforementioned flat where the narcotic substances were delivered and the price was paid by the buyers.

During the police surveillance carried out in February 2018, the following interventions were carried out: On 8 February 2018 at around 23.37 hours, the accused Secundino contacted the British tourist Luis Pablo to whom he offered the purchase of narcotic substance... At around 22.25 hours on 9 February 2018, the accused Secundino contacted the Algerian tourist Abelardo to whom after offering him the purchase of narcotic substance, he accompanied him to the flat indicated above where he purchased a plastic wrapper with a powdery substance and after the relevant analysis it turned out to be cocaine... On the same day 9 February 2018, at around 23.00 hours, the accused Secundino contacted Anton, a Swedish tourist, whom he accompanied to the flat to purchase a self-sealing bag containing marijuana... At around 23.00 hours on 15 February 2018, the accused Secundino recruited the American tourist Carmelo to whom he offered the purchase of the substance. He accompanied him to the indicated flat, where the latter, in exchange for 80€, acquired a ziplock bag containing cocaine...

### Legal grounds

One of the questions raised by the appellant is the validity of the records of the substance searches carried out on the alleged purchasers, given that they were foreigners and the records were drawn up without the intervention of an interpreter, which, according to the appeal, casts a shadow of doubt over the testimony of the police officers.

No one disputes that the use of interpreters is essential when those involved in the proceedings, whether they are under investigation, accused, witnesses or experts, do not know the language of the court or are unable to express themselves in that language, but as a constitutional right it is only recognised in relation to the accused.

This Chamber has proclaimed the right of the accused to use an interpreter, when he does not know the Spanish language, as one of the elements that make up the right to a trial with all guarantees, which derives directly from the Constitution, insofar as it recognises and guarantees the right not to suffer defencelessness (Supreme Court Rulings 70/2019, of 7 February and Constitutional Court Ruling 188/1991, of 3 October).

The same is expressed in Art. 6.3 c) of the Convention for the Protection of Human Rights and Fundamental Freedoms, and in Art. 14.3 f) of the International Covenant on Civil and Political Rights, which guarantee the right of every person to be assisted free of charge by an interpreter if they do not understand or do not speak the language used in the hearing or in court. Also, Directive 2010/64/EU of the European Parliament and of the Council of 20 October 2010 provides in Article 2 that the right to interpretation and translation in criminal proceedings "shall apply to any person from the time that they are made aware by the competent authorities of a Member State, by official notification or otherwise, that they are suspected or accused of having committed a criminal offence until the conclusion of the proceedings".

Both this Directive and Directive 2012/13/EU, on the right to information in criminal proceedings, have been transposed into Spanish law by Organic Law 5/2015, of 27 April, which has redrafted Articles 123 to 127 of the Criminal Procedure Act. These precepts regulate in detail the right of the accused who do not know Spanish or the

language in which the proceedings are conducted to the intervention of an interpreter, as well as to the translation of the proceedings. Article 520 h) of the same legal text also expressly recognises the detainee's right to an interpreter.

In this case, however, the absence of an interpreter is not complained of in relation to statements made by persons under investigation, but rather in relation to the records of the interception of substances, drawn up by police officers in the context of police investigations prior to the initiation of criminal proceedings.

The Lecrim makes no specific reference to the requirement of an interpreter in the attestation when proceedings are carried out with citizens who do not understand Spanish (Articles 769 to 772), but states that the attestation "shall be drawn up in accordance with the general rules of this law", which allows us to affirm that, as a general rule, the taking of witness statements must be carried out by means of an interpreter, under the conditions required by Articles 441 and following of the Lecrim. However, it cannot be inferred from this precept that in urgent proceedings such as the one being analysed here, it is reasonable and appropriate to demand that the police be accompanied by interpreters to translate what a witness may say, since when carrying out this type of proceedings, surveillance, it is not possible to know whether the person with whom the action is to be carried out does not speak Spanish and, in the case of a foreigner, what language they use. Nor would it be justified and illegal for the witness to be taken to the police station for this reason alone and detained until an interpreter can be found.

In this type of situation, in which the information sought from the witness is very simple, the identification of the place where the seized drug comes from, it is admissible for police officers to interrogate the witness *in situ* and communicate with him, translating his statements if they have the linguistic resources to do so, or even through gestural language. What is decisive is not so much what the witness may say as the occupation of the substance and the subsequent statement of the police officer at the trial describing the details of the event, the place where the transaction took place, details of the transaction, where the witness came from and where he acquired the substance, etc., since it is often the case, on the other hand, that the witness either does not appear at the trial or states the opposite of what he told the police officer.

In Supreme Court Ruling 51/2020, of 17 February, we were faced with a case that bears similarities to the present one. The regularity of an entry and search of a person who did not know Spanish was analysed and we said that "it is clear that as a procedure that affects the fundamental rights of a person suspected of having committed a criminal offence and the result of which may be used as evidence against them, the right of the accused to interpretation as part of their right of defence makes it advisable that it be carried out with an interpreter, if it is previously known that the accused does not speak Spanish, and provided that this is not prevented for reasons of urgency, given the special nature of the procedure or the impossibility of having an interpreter for the language of the accused". Therefore, reasons of urgency may be sufficient justification for dispensing with the interpreter, and if this is the case in a judicial proceeding with the intervention of the person under investigation, it is all the more reason to follow the same criteria in urgent police proceedings with witnesses.

The recent Supreme Court Ruling 266/2023, of 19 April, analysed a case very similar to the one we are now considering. The case involved a police officer who, in the

course of an investigation on a boat with migrants, questioned those on board because he knew the Arabic language, obtaining relevant information to continue with the investigations. This Chamber argued that "there can be no reasonable objection to a police officer, who knows the language used by the witnesses or victims of a particular event, using their particular knowledge of that language to interview them at the outset, thus being able to take the first steps to protect them and identify those possibly responsible for the events with the necessary speed. This does not overlap with the provisions contained in Articles 440 and 441 of the Criminal Procedure Act, already in the context of judicial proceedings, concerning the testimony of witnesses who do not understand or do not speak the Spanish language. In such cases, and certainly also when it is the person under investigation who is in this situation, it is necessary to have an interpreter appointed in the legally stipulated manner. Of course, even in the context of police proceedings, the statement of a detainee or a person suspected of committing a criminal offence will be worthless if the person asking the questions and receiving the answers also acts as an interpreter in the statement. However, it is quite different in the case of these first interventions in relation to those who may have been the victim of a criminal offence. There is nothing to prevent the officer who receives the complaint from translating it, where possible, and no interest worthy of protection would be served by this; nor would this procedure be used to obtain information necessary for the assistance of possible victims or the identification of possible perpetrators. It is easy to understand that no taint of unlawfulness could be identified in the interlocution of a police officer with the possible victim of any criminal act, taking advantage of his knowledge of a foreign language, to listen to and understand his account, to provide them with initial assistance and to come to know any relevant information about the identity of the alleged aggressor. And this is what happened here.

In the first investigative steps, where urgency is a determining factor, it is not unlawful for the police officer to use their knowledge of a foreign language to address witnesses and obtain the information necessary for the continuation of his enquiries, This is without prejudice to the police officer appearing at the trial to ratify the content of the investigation, submitting themselves to the contradiction of the plenary, giving the appropriate explanations on the circumstances in which the investigation was carried out and the result of the interrogation.

In this respect, it should be remembered that the *Lecrim* is very flexible with regard to the professional qualifications of the interpreter, which may be different depending on the availability of the interpreter at the time of the interrogation. As recalled in Supreme Court Ruling 51/2020, of 17 February, which makes a detailed study of the right to the interpreter in our criminal proceedings, the *Lecrim* does not require the interpreter to have an official qualification (Articles 441 and 762.8) and the qualification of the translators cannot be considered a *sine qua non* to ensure the constitutional legitimacy of the procedural act of interrogation. What is decisive is to rule out any risk that, as a result of the appointed interpreter's lack of expertise, doubts may arise as to the accuracy of their translation of what the defendant or witness really wanted to express, a question that will have to be assessed not only in relation to the interpreter's qualifications but also to the type of conversation taking place, which may be more or less elementary, and the time at which it takes place, which may be conditioned by the urgency of its practice.

Although these precepts refer to interrogations carried out in court proceedings and are not designed for a case such as the one analysed here, they allow us to deduce a useful principle or rule for this case: The qualification of the interpreter is not a prerequisite for the legality of the translation to the extent that, depending on the circumstances and in the absence of the availability of an interpreter, the translation can be carried out by any person who knows the foreign language, and therefore the translation carried out by the police officer in emergency situations such as the one analysed in this case is not tainted by any illegality whatsoever.

That said, the police officers involved in the seizure proceedings appeared at the trial and testified about what they personally saw, which was that the various buyers entered the guarded home and left with the drugs that were subsequently seized. Regardless of what the buyers said, the officers related facts of which they were eyewitnesses, hence the statements of the buyers which were reflected in the arrest reports were not decisive evidence for the decision to convict. Therefore, the lack of an interpreter is neither a procedural irregularity nor a deficiency that is relevant to the information provided by the police officers which, together with the other evidence, forms a sufficient and solid body of evidence for the decision to convict.

### Conclusions.

Interesting assessment by the SC on police action in an emergency situation, when the first enquiries may be decisive for the development of the subsequent investigation. Validity of the police translation carried out *in situ* by agents who have their own knowledge of the foreign language, on essential and accessory elements in the investigation of criminal acts.

As Supreme Court Ruling No. 576/2023 points out, if reasons of urgency can be sufficient justification for dispensing with the interpreter, and if this is the case in a judicial proceeding with the intervention of the person under investigation, there is all the more reason to follow the same criteria in urgent police actions with witnesses.

## **6. Supreme Court Ruling 628/2023, of 19 July. Damage caused by graffiti on a railway<sup>6</sup>.**

### Factual background

Criminal Court No. 23 of Barcelona in AP with No. 442/2019, against Armando, Arturo, Aurelio, Bernardino, Blas and Casimiro, which on 1 February 2021 handed down Ruling containing the following proven facts: SOLE. The accused, Armando, Aurelio, Bernardino, Blas and Casimiro, all of whom are of legal age and have no criminal record except for Blas, who has a criminal record but cannot be counted, at around 02:30 hours on 23/12/17, by mutual agreement, stopped the metro train on line 1 at Baró de Viver station in this city by pressing the emergency button, and then spray-painted on both sides

---

<sup>6</sup> This Supreme Court ruling has been published in the database of the Judicial Documentation Centre, CENDOJ. Supreme Court Ruling of 19 July 2023 - ROJ: STS 3485/2023. ECLI:ES:TS:2023:3485. Criminal Chamber. Resolution No.: 628/2023. Appeal No.: 4062/2021. Section: 1. Rapporteur H. E. Mr Antonio del Moral García.



of the metro carriages with spray paint, the cost of cleaning and tidying up having been estimated at 4175.31 euros". The Criminal Court handed down a ruling of acquittal which the Provincial Court upheld, with the Public Prosecutor's Office appealing in cassation.

### Legal grounds

The Supreme Court Ruling upheld the Public Prosecutor's Office's appeal and convicted the accused initially acquitted, as perpetrators of a lesser offence of misdemeanour.

The SC affirms that the lower case law was, in fact, divided. Some Courts held that when the action aimed at restoring the state of the property on which the drawings or graffiti were made did not go beyond mere cleaning, we would be dealing with a mere tarnishing, atypical after the decriminalisation of the specific offence (former Art. 626 CC). On the other hand, if the removal of the paintings generates a real damage or deterioration of the object that requires its replacement, Art. 263 CC would apply. The amount of the impairment would determine whether it was a minor or less serious offence. The criminal offence of criminal damage requires a harmful result in the form of the destruction or rendering useless of the property on which the action is taken.

Other provincial courts and tribunals, on the other hand, affirmed the inadmissibility of the conduct analysed in the crime of damage. To damage means to cause harm. He who tarnishes provokes it, all the more so when the modification of the external appearance differentiates the object from other identical objects, making it difficult or impossible to achieve an aesthetic uniformity suitable for a given function.

The criminal offence of Art. 263 CC, -crime of damage- describes as a typical conduct the causing of damage to other people's property. The objective aspect consists of causing damage, not covered by other titles, to another's property. The concept of damage usually includes the destruction, rendering useless, deterioration or impairment of a thing. Destruction is equivalent to the total loss of its value; uselessness is the disappearance of its qualities and utilities; deterioration is the loss of its functionality; the impairment of the thing itself is its partial destruction, a reduction of its integrity, or a loss of value.

Since it is a property crime, the result should include its economic evaluation, duly assessed and thus,

a) From a grammatical perspective, the offence of criminal damage covers destruction, deterioration, rendering useless and impairment. According to the dictionary of the Spanish language, *menoscabar* "means to diminish something, taking away a part of it, shortening it, reducing it; to deteriorate and tarnish something, taking away part of the allocation or lustre it used to have". On the other hand, to deteriorate means "to spoil, impair, bring something into inferior condition or to worsen, degenerate". It follows from these definitions that there are areas in which, while there is no physical destruction or damage to the material object, there is nevertheless deterioration, linked to a significant alteration of its external appearance. The conduct described in the *factum* caused damage to the property. Its reparation required action to restore it to its previous state, which is economically assessable and has been quantified.

b) From a logical interpretation, graffiti causes damage to property: this can be subsumed under the offence of damage insofar as the repair requires a financial outlay. The property has been damaged in its physical, aesthetic and functional configuration. It would be difficult to claim that the carriages have not been damaged and/or deteriorated, when a repair, which can be evaluated economically, is necessary to restore them to the state in which their owner had them.

c) From an interpretation derived from the evolution of legislation, it should be noted that the 1995 Code decided to differentiate the crime of damage from that of tarnishment of property (Art. 626 CC). The former covered damaging results with loss of substance; tarnishment, on the other hand, included acts of defacing the property, without physically damaging it, or damaging it in a way that could be repaired, i.e. without affecting the substance, without causing damage because it is easily repairable. It was not an action that could be subsumed under the damages of Art. 263, but rather under the tarnishment typified in the misdemeanour of Art. 626 CC repealed by the reform of the 2015 Code. The typical nature of the damage included the destruction of the thing, or the total loss of its value, or its rendering useless, which means the disappearance of its qualities or utilities, as well as the impairment of the thing itself, partial destruction, the cutting off of its integrity or the partial loss of its value. It was outside the scope of the offence, as it reserved a novel figure in Art. 626, the so-called "tarnishment". In its grammatical meaning it is "the action of removing grace, attractiveness or lustre from a thing"; it does not affect the substance of the thing, which continues to exist as such, although tarnished. Functionally, it continues to serve its purpose. Therefore, if the result entailed the loss of aesthetic conditions that could be repaired, it found its typical place in the misdemeanour of Article 626 of the Criminal Code and, after its repeal, in the administrative sanctioning area of the Public Safety Act (Art. 37).

The interpretation according to which the conduct which in 1995 was subsumed under the disappeared misdemeanour of Art. 626 CC, does not, however, lead us, without further ado, to the decriminalisation of the conduct due to the disappearance of the offence. The tarnishing of a property that implies a loss of its value or involves a need for reparation that can be economically evaluated, must be re-conducted to the offence of damage. The repeal of this provision does not lead to the decriminalisation of the conduct it contemplated. This can be deduced from the Explanatory Memorandum of the 2015 reform and some incidents in the processing that the appellant highlights in its arguments and which illustrate what the legislator's intention was. Decriminalisation of the misdemeanour of Art. 626 CC, which constituted a special precept (Art. 8 CC) by contemplating cases in which the basic result only required cleaning work, the conduct will find a place in the offence of damage if the result is property damage. The amount would determine the rank of the offence as minor or less serious.

If when Art. 626 CC was in force, the discussion was between the crime of damage and the misdemeanour of defacement, now the discussion is between the crime and the misdemeanour and the administrative offence of Art. 37.13 of the Public Safety Act, which has to be resolved according to the classic criteria of differentiating between criminal and administrative offences depending on the seriousness of the conduct and the result. Proportionality will need to be applied on a case-by-case basis.

Consequently, the damage that is declared proven is the result of an action aimed at its production. The need for reparation, -everything is ultimately susceptible of being



repaired-, entails an injury to the assets of others, consisting of a loss caused by the harm produced.

### Conclusions.

This Supreme Court Ruling unifies the criterion of the crime of damage in order to distinguish it from other related offences, such as tarnishment, which could distort its application. The repeal of the misdemeanour of tarnishment does not entail the disappearance of the misdemeanour of damage.

When the property has been damaged in its physical, aesthetic and functional configuration and requires an economically assessable repair to restore it to the state in which its owner had it, the concurrence of the typical and unlawful action of the crime of damage is unquestionable.

### **7. STS 693/2023, of 27 September. Offence of disclosure of secrets. Disclosure of images without the victim's consent**<sup>7</sup>.

#### Factual background.

The Mixed Court No. 7 of Parla, opened the proceedings 683/2018 for crimes of threats and discovery of secrets, against Cecilia; once concluded it referred it to the Criminal Court No. 1 of Getafe, (AP No. 118/2020) who issued sentence No. 132/2021 on 27 May 2021, which contains the following proven facts: "Conscientiously assessing the evidence, it is proven and thus declared that the accused Cecilia, with ID number NUM000, of legal age as she was born on NUM001 of 1989 and with no criminal record, with the intention of violating the privacy of Ms Elsa, posted on an unspecified date and time in August 2018 in the statuses of the WhatsApp application of her mobile phone two photographs of intimate parts of her, which she had obtained and whose origin was unknown, in which she included: "Elsa in Sardina's wife pose" and "OK Elsa".

#### Legal grounds

The legal representation of Ms Cecilia, Sentence number 445/2021, 14 September, issued by the Provincial Court of Madrid, Section 30, which resolves the appeal lodged against sentence number 132/2021 of 27 May, issued by Criminal Court number 1 of Getafe, in which she was convicted as the criminally responsible author of the crime against privacy provided for and punished in Article 197.1 of the Criminal Code, to a sentence of one year and one month in prison, with the corresponding accessory and thirteen months of fine.

It is argued that the criminal offence requires an act of seizure, without knowing whether the perpetrator managed to discover the secrets or violated them in the privacy and mere access to the protected data, which was not the case. On the other hand, there is

---

<sup>7</sup> This Supreme Court ruling has been published in the database of the Judicial Documentation Centre, CENDOJ. Supreme Court Ruling of 27 September 2023 - ROJ: STS 3727/2023. ECLI:EN:TS:2023:3727, Criminal Chamber, Resolution No: 693/2023, Appeal No.: 6019/2021, Section: 1. Rapporteur H. E. Mr Andrés Palomo del Arco.

also no "malice", i.e. the subjective type which, however, requires that purpose, together with malice in the act of seizure or access.

Certainly the proven facts indicate that it is unknown how the photographs came into the possession of the accused, although she certainly has the photographs of the victim's intimate parts, without her consent, and her disclosure is obvious when she incorporates them into the "status" section of her WhatsApp; the proven facts add "with the intention of violating the privacy of Ms Elsa", as they unmistakably identify her with both expressions: "Elsa in Sardina's wife pose" and "OK Elsa".

In short, only the conduct of disclosure is described, but not that of appropriation, and therefore it cannot be criminalised through the first or second paragraphs of Art. 197; nor through the third, as the proven fact does not describe an unconsented seizure. But even if they had been voluntarily sent by Elsa to her partner or any other person who in turn sent them to the accused, this would not prevent, in the hypothesis most favourable to the accused, their full compliance with the typical conduct contemplated in the seventh paragraph, which states that anyone who, without the authorisation of the person concerned, disseminates, discloses or transfers to third parties images or audio-visual recordings of that person obtained with their consent in a home or any other place beyond the reach of the gaze of third parties, when the disclosure seriously undermines the personal privacy of that person, shall be punished with a prison sentence of three months to one year or a fine of six to twelve months. A fine of between one and three months shall be imposed on anyone who, having received the images or audiovisual recordings referred to in the previous paragraph, disseminates, discloses or transfers them to third parties without the consent of the person concerned.

### Conclusions.

This Supreme Court Ruling describes the scope of Art. 197 of the Criminal Code in its different sections, which include each and every one of the imaginable criminal modalities that affect the disclosure of secrets and clearly attack people's privacy. In this typical range, punishments range from simple disclosure, to seizure and further dissemination. It is also a warning to surfers of the digital footprint or trail left by the use of social networks or messaging applications of all kinds for illicit activities.

A different matter is the lightness of the penalties assigned by the legislator.

## **8. Supreme Court Ruling 647/2023, of 27 July. Offence against sexual indemnity committed by a physiotherapist. Interpretation of the victim's consent. Effectiveness of reporting and willingness to report<sup>8</sup>.**

### Factual background

The Provincial Court of Barcelona, Sect. 6, in the summary proceedings No. 6/2018 from the Court of Preliminary Investigation No. 15 of Barcelona handed down Ruling dated 7 September 2020 which includes the following proven facts: "1. The defendant Rodolfo had been providing his services as a physiotherapist and osteopath of the Barcelona Football Club for 30 years, having developed functions of coordinator of physiotherapists of the aforementioned Club and the first division football team, In 2016, when the events occurred, he worked as a physiotherapist for the Club's employees, his practice being located in the FCB facilities in Les Corts, in a mezzanine of the premises that Asistencia Sanitaria, FCB's sponsor, has in the Les Corts facilities. 2. Enma worked as an administrative assistant at the FCB facilities in Les Corts in Barcelona. As she had a blockage in her head and neck caused by the cervical pathology she suffered from, she was visited in November 2016 by Dr Torcuato, the club doctor responsible for the health of its employees, at his office in the FCB Ciutat Esportiva in Sant Joan Despí. The aforementioned doctor, after confirming the treatment with the traumatologist, considered that the physiotherapy treatment to be provided by the defendant in the office designated for this purpose and for the FCB employees at the Les Corts facilities would be beneficial. 3. The defendant's physiotherapy sessions with Enma began in the month of December 2016; during the third session, the defendant tried to massage her abdominal area, going down until he reached the complainant's pubic area. She advised him that she had her period, and the defendant then stopped massaging the area; finally, in the fourth session, which took place on 19 December 2016, at a certain moment the defendant lifted Enma's left leg, which caused pain in her groin, and the defendant began to work on it until he reached her vagina, all without gloves and guided by a libidinous spirit, he began to touch the inner labia and put his fingers in and out of her vagina, touching her clitoris. She could hear the defendant spitting saliva on his fingers as he carried out this action of putting his fingers in and out of her vagina, and then went on to touch her breasts, massaging them and stretching her nipples, being asked by the defendant if she was all right, and the complainant replied in the affirmative, all with the intention of putting an end to the situation and leaving the place.

In neither case did the defendant indicate that he would perform an intracavitary treatment involving the insertion of his fingers into the patient's vaginal cavity, nor did he ask for her consent to do so.

### Legal grounds

The appeal considers that the requirements of the fundamental right to the presumption of innocence have not been respected by not considering it proven that the manoeuvres

---

<sup>8</sup> This Supreme Court Ruling has been published in the database of the Judicial Documentation Centre, CENDOJ. Supreme Court Ruling of 27 July 2023 - ROJ: STS 3488/2023ECLI:ES:TS:2023:3488, Criminal Chamber, Resolution No: 647/2023, Appeal No.: 5045/2021, Section: 1. Rapporteur H. E. Mr Antonio del Moral García.

carried out by the defendant with his fingers in the patient's vaginal cavity were part of the physiotherapy treatment he was carrying out. At the same time, the victim's statements, which differ from the facts acknowledged by the appellant, would be insufficient to consider both the touching of the victim's nipples and the absence of verbal consent on her part as proven. There would be no evidentiary basis for presuming libidinous intent in these manoeuvres.

The plea, which is extensive, well prepared, systematised and constructed, like the entire appeal, and which is well constructed, with all the defensive loopholes being closed and a good number of decisions from both minor and ordinary case law being cited which could be favourable to the defence's argument, is not, however, successful.

We must situate the scope of the challenge. It is threefold:

a) Touching of the nipples could not be considered as proven. The victim's statement would provide little basis for such a conviction.

b) The conclusion on the absence of consent of the victim deserves the same assessment; the exculpatory version of the accused (there was verbal consent) could not be rejected on the basis of the patient's statement alone.

c) Finally, and here lies the main thrust of the plea, it would also be an attack on the presumption of innocence to reject the hypothesis of being faced with an action justified in terms of health, as the Provincial Court admitted, although without drawing from this possibility, which was well supported by evidence, its ultimate consequences, which would lead to acquittal.

We reverse the order of analysis chosen by the appellant in his presentation. It is not neutral from the point of view of the argumentative *iter*. From the moment it is realised that the first of the premises, which the resource skilfully tiptoes around, is not acceptable, the others lose much of their argumentative potential.

In fact, the victim's statements referring to touching her breasts and stretching her nipples, with movements that can in no way be justified from a therapeutic perspective, to a large extent deprive the defendant's other defensive allegations of credibility. If the breasts had not been massaged, the argument aimed at at least casting doubt on the circular movements of a finger on the clitoris might have a chance - a slim one at any rate - but if these other rubbings are taken as true, the hypothesis that the insertion of fingers, in a manner incompatible with medical practice, without gloves, into the vaginal cavity, with the circular movements described by the victim, was part of the treatment applied, loses credibility.

In this first approach, there is no reason to imagine that the victim would have fabricated, from the first moments, non-existent touching of the nipples; or that she would have embellished her story with this secondary addendum to give greater force to an action that in itself had an undoubted expressive potential: direct contact of the fingers with the inner part of the vaginal cavity, in a manoeuvre that no layman would imagine compatible with therapeutic massages. These facts are accepted by the appellant: he tries to explain them with a professional justification. He does not have a professional justification for the other touching, and therefore has no choice but to call them untrue.

But it is totally implausible that they have been maliciously - or unconsciously - invented and exposed by the complainant, departing from reality, with an unjustified and impossible to explain eagerness to reinforce the veracity of what the appellant has not denied.

The defence hypothesis fits very poorly with the testimonies of the people the victim spoke to after the events. Nor is it congruent with her subsequent psychological state as described by those who saw her in the moments following the episode, and which later led to her need for psychiatric treatment.

It cannot be said that the assertion that nipple touching took place is without proof; not at all. Nor that the evidence is fragile because it derives from someone interested in harming the accused. Speculation about a conspiracy by the company or some of its employees using the victim to get him fired is as far-fetched as it is unsustainable. It is an insult to the average intelligence, over and above certain internal tensions with other professionals at the Club.

The fact that the victim was encouraged to report by Club staff does not diminish the credibility of her account, nor does it deprive the report of its effectiveness as a condition for prosecution. Whistleblowing must be voluntary, free, but not entirely spontaneous or uninfluenced or unadvised. The appearance in the case supporting the accusation endorses the personal decision to denounce; personal, even if prompted or advised by third parties. Nor can a subsequent waiver, with an express protest of non-consent, be effective. Pardon ceased to be a ground for extinction of criminal liability in these crimes years ago.

The complaint cannot be revoked. This pardon, externalised in a carefully and thoughtfully written document that combines the defendant's version with that of the victim, not saying that the conduct was in accordance with the *lex artis*, but that this is what the appellant maintains, cannot have any effect at this point, without prejudice to the value that may be given to it in a possible request for a pardon.

### Conclusions.

Once again, in crimes against sexual freedom, we find ourselves with the victim's version, uniform, constant and prolonged over time, in order to undermine the presumption of innocence of the person under investigation, emphasising the core and accessory elements of her statement as opposed to other less credible, implausible or captious statements by the accused. It is also worth highlighting the validity given by this Supreme Court Ruling to the immediate communication of these events by the victim to third parties, who are subsequently called to the process as witnesses, giving an account of what happened and who are finally the ones who insist that the victim denounce, without there being a spurious motive for this reason.

## **9. Supreme Court Ruling 624/2023, of 18 July. Thwarted malice aforethought and cohabitative malice aforethought<sup>9</sup>.**

### Factual background

In a case followed before the Provincial Court of Alicante Jury Procedure No. 284/2020 from the Court of Violence against Women No. 1 of Denia, a sentence was passed on 4 April 2022 which includes the following proven facts: “ONE. The accused Alberto, of legal age, with Foreigner ID NUM000, a native of Holland, and with no criminal record, on the night of 15 February 2020 went out to various leisure establishments in the town of ADDRESS000, coinciding in the ADDRESS001 Bar with his sentimental partner, Amelia, who went to said establishment at around 22:00 hours accompanied by another unidentified man, leaving the place a few minutes later. Subsequently, at around 01: 00 hours on 16 February 2020, the accused, suspecting that Amelia was with another man, went to look for her at the ADDRESS002 Pub in the aforementioned locality, seeing her there accompanied by another man, after which the accused went to the ADDRESS003 Bar and, after 20 minutes, returned to the ADDRESS002 Pub to check what Amelia was doing and, once there, had an argument with her because the accused began to reproach her for kissing another man. Between 02:00 and 03:00 hours on the same day, 16 February 2020, the accused left the ADDRESS002 Pub together with his partner Amelia, and they both went to the property ADDRESS004 run by the former, located at AVENIDA000, NUM001 in ADDRESS000. Once inside the establishment, Amelia went to the toilet, and the accused took advantage of the opportunity to take a large knife, with a blade of about 15 centimetres, which he had on a wooden desk table, and, carrying the weapon in his hand, he went to the bathroom, where Amelia was washing her hands, at which point the accused, with the intention of ending the life of his romantic partner, stabbed her in the back and when she turned to face the accused, he stabbed her again in the chest, left thigh, left elbow, right forearm and right hand, stabbed her in the back and when she turned to face the accused, he stabbed her again in the chest, left thigh, left elbow, right forearm and left hand, Amelia fell to the ground and he lunged at her and finally cut her neck with the knife, causing a total of 16 incised and puncture wounds, leaving Amelia's lifeless body lying on the floor of the bathroom of the real estate agency and left the place.

### Legal grounds

The appellant alludes to the possibility of assessing thwarted malice aforethought, citing Supreme Court Ruling no. 790/21 of 18/10/2021, and therefore, at least, he also acknowledges that the assault began as aggravated.

In any case, we would say that this Supreme Court Ruling (we have not had the opportunity to find, nor are there any other Supreme Court Rulings cited), cites cases that involve a qualitative alteration or a certain rebalancing of the initial situation that in no way occurs in the present case, thus mentioning as a paradigmatic example when the lethal result is achieved despite the victim discovering the aggressor who was lying in wait to surprise him, and although the latter manages to end her life, this takes place after a hard-fought fight that was intended to be avoided by means of the failed ambush, and

---

<sup>9</sup> This Supreme Court ruling has been published in the database of the Judicial Documentation Centre, CENDOJ. Supreme Court Ruling 624/2023, Criminal Section 1 of 18 July 2023 (ROJ: STS 3399/2023 - ECLI:ES:TS:2023:3399). Appeal: 10744/2022. Rapporteur H. E. Mr Antonio del Moral García.



so, he adds, the would-be assassin sets up the ambush and manages to surprise his enemy, but the latter reacts, gets rid of her assailant and undertakes an active and powerful defence that will finally prove to be useless. Death only occurs after a balanced fight of variable and uncertain course, although the aggressor finally achieves his initial purpose -death-, although not with malice aforethought, and in fact this Supreme Court Ruling warns that "...not every case in which there is a defensive reaction -already useless- by the victim, because he becomes aware of the attack, breaks the principle of malice aforethought. The problem will only arise when the decisive initial advantage sought, which constitutes premeditation, does not decisively condition the whole aggressive sequence that continues beyond the initial blow; when there is a certain cut, fissure or substantial change of scene in which a certain balance of forces that the aggressor intended to avoid is recomposed".

In the present case, due to the circumstances already indicated, the mere twisting of the victim upon receiving the brutal stab in the back, which the appellant himself indicates affected the right lung, with a 15 cm knife, which is not followed by any rebalancing of the situation or genuine struggle or fight, the defensive wounds are compatible with the aggravating circumstance as expressed in the case law and indicated by the lower court ruling, but rather what occurs is a brutal aggressive continuation with the knife that continues even with the victim on the ground, cutting her neck, making it unfeasible to degrade the aggravation to the abuse of superiority.

Whether or not the first stab was necessary to kill, it is sufficiently powerful and surprising, it is produced from behind, to prevent a defence against the aggressor who, thanks to this first stabbing and the stun it causes, facilitates the rest of the following multiple and consecutive stab wounds received without the possibility of any real defence whatsoever".

### Conclusions.

Once again we find ourselves with extravagant categories of malice aforethought in the study within the framework of crimes against persons, as is the case with this modality referred to as thwarted malice aforethought which, despite the appellant's citation, is not reflected in the previous jurisprudence of the SC. It is really a type of prevalence whose appreciation runs through the factual terrain of the explanation of what is proven.

It also includes cohabitative malice aforethought, the configuration of which is based on an environmental situation inherent to the cohabitation between the parties involved, nothing more.



## **10. Constitutional Court Ruling 92/2023, of 11 September. Police capture of images in communal garages without judicial authorisation.**<sup>10</sup>

Factual background.

In this Constitutional Court Ruling we analyse an amparo appeal no. 3456-2021, brought by Mr Abderrahman against the ruling of 22 May 2020 handed down by Criminal Court no. 4 of Barcelona in the abbreviated procedure no. 129-2020; against the ruling of 26 August 2020 of the Tenth Section of the Barcelona Provincial Court, dismissing appeal no. 131-2020, filed against the previous ruling; and against the order of the Criminal Division of the Supreme Court of 8 April 2021, refusing to admit cassation appeal no. 4479-2020. The Public Prosecutor's Office has intervened.

We can already anticipate that the Constitutional Court Ruling upholds the appeal for protection, declaring the nullity of the installation of cameras to record images by the Guardia Urbana of Barcelona in the garage of a residents' association, without judicial authorisation.

Legal grounds

We are focusing on the analysis of the fundamental rights affected, that of privacy and the right to one's own image.

As has been indicated, the appellant alleges infringement of the right to privacy and to one's own image, as if they were the same right, in relation to the principle of criminal legality, because he understands that in the police investigation that ultimately led to his conviction for a drug trafficking offence, the installation of cameras to record images by the Guardia Urbana of Barcelona in the garage of a residents' association, without judicial authorisation or permission from the association or communication to the competent authority, played a decisive role.

The appellant's approach makes it necessary to first determine which of the fundamental rights guaranteed by Art. 18.1 CE, to privacy and to one's own image, is the one affected in the present case by the actions of the officers of the Guardia Urbana de Barcelona in the exercise of their investigative functions as judicial police (Art. 126 CE). Because it is necessary to remember that, in accordance with consolidated constitutional doctrine, the rights to honour, to personal privacy and to one's own image, despite their close relationship with each other, as rights of the personality, derived from human dignity (Art. 10.1 CE) and aimed at protecting the moral heritage of individuals, nevertheless have their own specific content. In other words, they are autonomous rights, so that as each of them has its own substantive nature, the assessment of the infringement of one does not necessarily entail the infringement of the others (among others, Constitutional Court Rulings 81/2001, of 26 March, LG 2; 156/2001, of 2 July, LG 3; and 14/2003, 28 January, LG 4). In the present case, in accordance with the account of the facts declared proven in the judgments challenged in the amparo proceedings, it

---

<sup>10</sup> This Constitutional Court Ruling has been published on the website of the Judicial Documentation Centre, CENDOJ. Supreme Court Ruling of 11 September 2023 - ROJ: Constitutional Court Ruling 92/2023. ECLI:ES:TC:2023:92. Resolution No.: 92/2023. Appeal No.: 3456/2021. Section: 1. Rapporteur H. E. Mr Enrique Arnaldo Alcubilla.

must be understood that the fundamental right affected by the disputed action of the Barcelona City Police officers, installation of an image recording system in a garage of a residents' association, is the right to personal privacy. As this court has repeatedly stated, the right to personal privacy implies the existence of a sphere of one's own, reserved from the action and knowledge of others, which is necessary, according to the standards of our culture, to maintain a minimum quality of human life. In one way or another, constitutional doctrine insists that the right to privacy attributes to its holder the power to reserve a space protected from the curiosity of others, from unwanted publicity and, consequently, the legal power to impose on third parties, whether private individuals or public authorities, the duty to refrain from any intrusion into the intimate sphere and the prohibition to make use of what is thus known.

The privacy protected by Art. 18.1 EC is not necessarily limited to that which takes place in a domestic or private sphere. In particular, as we have highlighted in Constitutional Court Ruling 12/2012, of 30 January, LG 5, it is relevant, as a criterion that must be taken into account to determine when we are faced with manifestations of privacy that can be protected against unlawful intrusions, that of the reasonable expectations that the person himself, or any other person in his place in that circumstance, may have of being protected from the observation or scrutiny of others. Thus, for example, when in an inaccessible spot or in a solitary place due to the time of day, he can conduct himself with complete spontaneity in the well-founded confidence of the absence of observers. On the contrary, there can be no reasonable expectation in this respect when one intentionally, or at least consciously, engages in activities which, because of the circumstances surrounding them, are clearly capable of being recorded or made public.

For its part, the right to one's own image is, according to our doctrine, the "right to determine the graphic information generated by the holder's personal physical features that can be publicly disseminated. Its scope of protection includes, in essence, the power to prevent the acquisition, reproduction or publication of one's own image by an unauthorised third party, whatever the purpose pursued by the person who captures or disseminates it", and therefore covers "the defence against non-consensual uses of the public representation of the person that are not protected by any other fundamental right, particularly against the use of the image for purely lucrative purposes".

Without going into the question of whether that garage has the status of a home for the purposes of Art. 18.2 EC, since the right to inviolability of the home is not invoked in the present application for amparo, it is clear that, in accordance with the aforementioned criterion of reasonable expectation of privacy, that space belongs to the sphere of privacy protected by Art. 18.1 EC, as it is an enclosed space which is, moreover, private property with access restricted to the owners of the parking spaces and to third parties to whom they allow entry, and it is therefore clear that it is a place where the appellant had a reasonable expectation of not being surreptitiously listened to or observed by third parties. In short, it must be concluded that it is the right to personal privacy that is affected in the present case by the fact that the officers of the Guardia Urbana of Barcelona, in the course of an investigation into a drug trafficking offence, installed an image capture system inside a garage belonging to a residents' association. The appellant himself acknowledged at the trial that he had gone there with his brother and co-accused to help him load and unload packages from a vehicle parked there, although he denied that those packages contained hashish.

It will therefore be necessary to examine whether the police action at issue in the present case infringed the appellant's right to personal privacy..

What Art. 18.1 CE guarantees is a right to secrecy, to be unknown, for others not to know what we are or what we do, preventing third parties, whether private individuals or public authorities, from deciding what the boundaries of our private life are, each person being able to reserve a space protected from the curiosity of others, regardless of what is contained in that space.. However, the right to personal privacy is not an absolute right and therefore does not confer on its holder an all-encompassing power of exclusion, since, like any fundamental right, it can yield to other constitutionally relevant rights and assets, provided that the limitation that it has to undergo is based on a legal provision that has constitutional justification, is necessary to achieve a legitimate aim, is proportionate to achieve it and, furthermore, is respectful of the essential content of the right and therefore, it cannot be denied that in certain circumstances, certainly exceptional, there may be constitutional rights or assets that legitimise the capture and even the dissemination of images that entail an intrusion into the personal or family privacy of a person. In this regard, it should be recalled that constitutional jurisprudence has recognised that the public interest in the investigation of a crime, and more specifically, the determination of facts relevant to criminal proceedings, is a constitutionally legitimate aim that may permit interference with the right to privacy, since, in effect, "the prosecution and punishment of crime constitutes a good worthy of constitutional protection, through which others such as social peace and public safety are defended, goods that are also recognised in Arts. 10.1 and 104.1 CE".

It follows from the above that the Legislator must enable the appropriate legal powers or instruments so that, with due respect for constitutional rights, principles and values, the State security forces and corps can carry out the crime investigation function that legitimately corresponds to them. In other words, there must be express legal authorisation for the judicial police to interfere with a person's right to privacy or personal image, in the framework of an investigation aimed at clarifying the authorship, causes and circumstances of a crime. For any interference in the sphere of fundamental rights and public freedoms, which directly affects their development, or limits or conditions their exercise, requires legal authorisation This reservation of law is the only effective way of guaranteeing the requirements of legal certainty in the field of fundamental rights and civil liberties. Therefore, the law authorising interference with fundamental rights must clearly indicate the scope of the discretion conferred on the competent authorities, as well as the manner of its exercise, and analogical interpretations are not admissible.

It is the ruling of the Barcelona Provincial Court which identifies Art. 588 quiniques a) Lecrim, introduced by Organic Law 13/2015, of 5 October, as the precept in which this police action would find legal authorisation. It provides as follows: "1. The judicial police may obtain and record by any technical means images of the person under investigation when they are in a public place or space, if this is necessary to facilitate their identification, to locate the instruments or effects of the offence or to obtain relevant data for the clarification of the facts. 2. The measure may be carried out when it concerns persons other than the person under investigation, provided that the usefulness of the surveillance would otherwise be significantly reduced or there are well-founded indications of the relationship of such persons with the person under investigation and the facts under investigation. One of the measures that can be adopted by the judicial police in the framework of a specific criminal investigation, without the need to request judicial

authorisation, is precisely that which has just been transcribed, consisting of the use of technical devices for capturing images in public places or spaces. It is, therefore, Art. 588 quinquies a) Lecrim the provision which, where appropriate, could provide legal cover for police interference with the right to personal privacy which is at issue in this appeal for amparo, and other rules cited by the appellant, which refer to other cases, must be disregarded.

In the contested ruling, the Barcelona Provincial Court has interpreted the clause "public place or space" contained in the first section of Art. 588 quinquies a) Lecrim, in the sense of considering that it also includes all those places or spaces which, even though they are not strictly speaking public spaces, do not constitute a domicile in accordance with the provisions of Art. 18.2 CE. Therefore, it is understood that Art. 588 quinquies a) Lecrim empowers the judicial police in the framework of a criminal investigation, without the need for judicial authorisation, to install video cameras and record images in any space, even if it is closed and privately owned, as long as it does not deserve to be classified as a home for constitutional purposes. This would be the case, as in the present case, when the police capture the images inside a garage of a residents' association, a space that the judicial body considers to be an enclosed place or space of private ownership, but public in terms of its use, although with restricted access. Such reasoning cannot be shared, because it implies an extensive interpretation of the legal provision which is not consistent with the requirements of legal certainty in the field of fundamental rights and public freedoms referred to in the aforementioned constitutional case-law.

Indeed, although there is a legislative provision that allows the judicial police to record images in the framework of a criminal investigation without judicial authorisation, this legal authorisation is limited to public places and spaces, a notion that has an unequivocal meaning, referring to spatial areas of use by the entire public, without restrictions. This is considered to be the case, as the Public Prosecutor's Office points out in its allegations, in Circular 4/2019, of 6 March, of the Public Prosecutor's Office, which, citing constitutional doctrine (Constitutional Court Rulings 134/1999, of 15 July; 144/1999, of 22 July, and 236/2007, of 7 November), points out that when Art. 588 quinquies a) Lecrim refers to "public places or spaces" it must be understood as referring to "those in which the person under investigation cannot exercise their right to privacy, where they cannot keep what is happening from the knowledge of others, as they have no right of exclusion over that place. This concept is contrasted with that of private places, which are those [...] where the individual can limit the access of third parties, thus exercising areas of privacy excluded from the knowledge of others".

The interpretation that the ruling of the Barcelona Provincial Court gives to Art. 588 quinquies a) Lecrim, by understanding that a garage belonging to a residents association: is a public space for these purposes, departs from the premises established by the legislator that authorise the interference of the judicial police in the fundamental right to personal privacy. Through this interpretation, the citizen's reasonably well-founded expectation as to how the authorities should act in the application of the law is broken, and thus the requirements of legal certainty and legal certainty demanded by the principle of legality in the area of interference with fundamental rights and public freedoms are not met. We are not, therefore, faced with a defect due to the inadequacy of the law, with a judgement on the quality of the law, but rather what is at issue in this case is the effect associated with a complete absence of legal authorisation for the interference of the judicial police in the right to one's own image, as a consequence of the recording

of images without judicial authorisation inside the garage of a residents' association. Section one of Art. 588 quinquies a) Lecrim refers incontrovertibly to the capture of images in public places or spaces, not in places or spaces of a different nature, such as private garages, even if these are used by a number of people. The exegesis of the precept carried out by the Barcelona Provincial Court implies a reductive interpretation of Art. 18.1 CE, in violation of constitutional doctrine in this respect. There is no harm in recalling that "effectiveness in the prosecution of crime, the legitimacy of which is unquestionable, cannot, however, be imposed at the expense of fundamental rights and freedoms" (Constitutional Court Ruling 341/1993, of 18 November, LG 8).

### Conclusions.

After this long dissertation by the Constitutional Court on the fundamental right affected by the police use of a camera inside a communal garage, the right to privacy or the right to one's own image, it concludes by saying that the police recording of images of the appellant in amparo inside the private garage in which the car in which a cache of 44 kilos of hashish was finally seized was parked lacked legal authorisation, and therefore violated the appellant's right to personal privacy, rendering the prosecution evidence obtained by this means null and void.

I do not agree at all with the Constitutional Court's conclusion on the evidence in question, precisely because of the reasoning used and because of its own reasons and arguments. I agree with the categorical affirmation that the right affected is that of privacy and not the right to one's own image, whose scope, outline and characteristics are not identical, but far from achieving the same annulling result, I disagree completely because in my opinion Art. 588 quinquies a) of the Lecrim is crystal clear. You do not need a warrant to take pictures in a public place, but you do need a warrant to take pictures in a private place. The Constitutional Court wanders in a grey area of what is neither totally public nor totally private and assimilates the protection afforded to the latter to the grey area, when in reality a garage such as the one analysed is an enclosed space of private ownership but of public use and, in my opinion, the reasonable expectation of privacy is so relative, diffuse and illusory that it should hardly require prior judicial authorisation.

I reproduce below the explanation of a dissenting opinion against the criterion of the majority of the Constitutional Court, "...it cannot be affirmed that a community garage is protected by the right to privacy, unless the content of this right is distorted and the right to personal and family privacy, which is dealt with in Art. 18.1 EC is transformed into a sort of non-existent right to neighbourhood or community privacy, ontologically contrary to the very essence of the concept of privacy, as it is detached from the sphere of the personality and dignity of the individual with which the rights of Art. Art. 18.1 EC are connected. It is therefore notorious - at the risk of diluting the concept of privacy - that in this space, accessible at all times to third parties, not only the owners of the parking spaces, whether they own or rent them, but also their companions and other persons authorised to access them, such as cleaning or repair workers, among others, no one can expect to be protected from the scrutiny of others. In other words, there is no expectation of privacy in a communal garage that can be accessed by a plurality of people...".



## **11. Supreme Court Ruling 750/2023, of 11 October. Cultivation of marijuana. Forms of participation. Commission by omission does not apply<sup>11</sup>.**

### Factual background

The Court of Preliminary Investigation no. 5 of Castellón, opened Abbreviated Proceedings 1224/17 for an offence against public health, against Fermina and Gracia; once concluded, it was referred to Criminal Court no. 2 of Castellón, criminal case no. 403/2019, who issued Ruling no. 201/2021 of 4 June, which contains the following proven facts: "The accused Gracia and Fermina, both of legal age and with criminal records not computable for the purposes of recidivism, acting by prior and mutual agreement, were engaged in the cultivation of marijuana plants in the house located at CAMINO000 No. NUM000 in the town of Castellón, to be sold or distributed to third parties.

After receiving information from the theft group of the National Police that numerous marijuana plants could be seen from outside the house, the agents of the UDYCO went to check the veracity of the information on 5/07/2017, seizing 236 marijuana plants of about 50 cm planted in pots, 11 marijuana plants planted in the ground of about 120 cm, a large quantity of marijuana buds and a digital scale.

The plants seized were analysed and found to have a total net weight of 18,315.86 grams of usable dry weight of the narcotic substance cannabis sativa.

The narcotic substance marijuana seized fetches an approximate price on the illicit market of €25,622.68, sold per kg and/or €100,004.58 sold in grams, according to the expert appraisal carried out.

### Legal grounds

The appellant's main argument is that mere cohabitation in a home where the commission of a crime has been discovered, without other incriminating circumstances, is not a sufficient basis to rebut her presumption of innocence.

If one were to use a strict conception of a result, it could be understood that "acts of cultivation" are already a result; but knowing that one cultivates is in no way "equivalent", in the sense of the rule, or in any other sense, to cultivating. Owning or managing a villa where a third party resides does not entail a duty to prevent the cultivation of marijuana there; and even if it does entitle the owner to cease such residence, it does not identify an obligation to cease cultivation. Without any concrete act of favouring such cultivation, no participation is predictable.

Moreover, even if the appellant also resided in the house, this circumstance alone would not be sufficient to establish her criminal participation.

---

<sup>11</sup> Ruling of the Supreme Court published on the website of the Judicial Documentation Centre, CENDOJ. Supreme Court Ruling of 11 October 2023 (ROJ: STS 4182/2023 - ECLI:ES:TS:2023:4182). Ruling: 750/2023. Appeal: 7079/2021. Rapporteur: H. E. Mr Andrés Palomo del Arco.

Supreme Court Ruling 935/2022 of 1 December insists that it is true that when it comes to crimes against public health due to drug trafficking, case law (vid. Supreme Court Rulings 1280/2005, of 7-11; 1322/2011, of 7-12; 296/2016, of 11-4) has established that the mere knowledge on the part of the spouse or similar persons of the perpetrator's activity is not sufficient to give rise to criminal liability. Thus, it has been pointed out that "knowing that the person with whom one lives with has drugs with the intention of trafficking them does not in itself imply participation in the crime of drug trafficking or the obligation to report such a fact, nor does it allow one to affirm the existence of a position of guarantor that the trafficking will not take place". Therefore, knowledge does not provide a basis for co-perpetration. It is of course possible to share possession in this offence, but to the extent that criminal liability for the acts of others must be excluded. In such cases, additional circumstances beyond mere family cohabitation will be required to establish that co-perpetration in the sense of actual co-possession of the drug can be inferred.

There are multiple manifestations of this jurisprudential criterion, such as Supreme Court Ruling 1001/2021, of 16 December and those cited therein, and the case law of this Court has repeatedly affirmed that the mere fact of cohabiting in the home where an activity aimed at the storage and distribution of drugs is carried out is not sufficient to attribute punishable participation in it, even when there is knowledge of it. It is also required to be involved in an activity which by its tendency can be qualified as facilitating trafficking. The appeal invokes this doctrine, citing Supreme Court Ruling 858/2016, of 14 November, and those condensed therein.

In the same sense, we explained in Supreme Court Ruling 270/2018, of 5 June, that "among the fundamental principles of Criminal Law is, without exception, that of personal liability, according to which the basis of criminal liability requires, as a minimum, the commission of a culpable action, in such a way that no one can be held liable for the actions of another. The Constitutional Court has held that this principle makes it necessary to establish clear objective delimitations in cases where the external aspect of the conduct is described in the law in such an ambiguous manner that its literal application is not possible, as in the case of possession of drugs for the purpose of trafficking. Mere knowledge of the existence of the drug does not imply participation in the crime (among others, Supreme Court Ruling 3/2008 of 26 December)". And we highlighted in the aforementioned Supreme Court Ruling 270/2018, that this Court has ruled on the issue in cases of family cohabitation, to point out that access to drugs by the spouse or cohabitant, the parent or the child, cannot in itself entail the realisation of the criminal offence. It is necessary to exclude criminal liability for other people's acts, which requires additional circumstances to be accredited that go beyond mere family cohabitation and that allow the deduction of co-perpetration in the sense of real co-prosecution of drugs (among others Supreme Court Rulings 4 December 1991, 196/2000 of 4 April, 1888/2001 of 4 February 2002, Supreme Court Rulings 415/2006 of 18 April, 771/2010 of 23 September, 1322/2011 of 7 December).

## Conclusions

In a uniform and constant manner, the SC has maintained the thesis in matters of co-perpetration and participation of excluding criminal liability for the acts of others, which requires that, where appropriate, additional circumstances beyond mere family or



domicile cohabitation be accredited and that the active involvement of the suspect can be deduced from other incriminating elements.

**12. Constitutional Court Ruling 68/2023 of 19 June. Infringement of the right of the person under investigation to information on the facts with which he is charged and access to the proceedings, as statements of the right of defence, when the case is under investigation secrecy<sup>12</sup>.**

Factual background

At the time the application for amparo was filed, the appellant was under investigation in preliminary proceedings no. 9-2016, which were being heard by Preliminary Investigation Court no. 2 of Terrassa, in which the procedural secrecy of the proceedings had been ordered. On 26 June 2018, in the course of the investigation in the said criminal case, the appellant was arrested following a search of his home, where €18,000 in cash was found, along with documentation on the sale of jewellery and documentation relating to a third person, also under investigation in the criminal case. Once he was brought before the court on 27 June, after informing him of his rights as a detainee - among which he did not mention the right of access to the essential elements of the proceedings necessary to challenge his detention - the investigating judge questioned him after indicating that the case had been declared secret and that he was being investigated for the crimes of belonging to a criminal organisation, drug trafficking, money laundering, fraud and forgery. When questioned about this, the detainee stated that he had not done anything and that he had not been specifically informed of anything, and that, faced with such global accusations, without being told exactly what he had done, he could not answer what he had or had not done. The investigator then agreed to hold the hearing provided for in Art. 505 of the Lecrim Act, in order to make a decision on what his personal situation would be during the investigation. The Public Prosecutor's Office requested his pre-trial detention on the grounds that he was the perpetrator of the offences under investigation. The detainee's lawyer opposed the requested precautionary measure on the grounds that she was unaware of the facts on which the prosecutor based his claim, that the detainee could explain the origin of the objects seized in the house search and that there was no reason to deprive him of his liberty. She reiterated that with the little she knew of the case, due to the previous declaration of procedural secrecy, there was no basis for remanding him in custody. Following the appearance, the examining magistrate issued an order ordering the appellant to be remanded in custody, without bail, on 27 June 2018. In the copy of the order that was notified to the appellant, the considerations of the decision that referred to the evidence of criminality that supported the indictment (LG 2 b)), or its origin, were omitted, justifying such reserve on the grounds of the secret nature of the investigation.

---

<sup>12</sup> This Constitutional Court Ruling has been published on the website of the Judicial Documentation Centre, CENDOJ; Constitutional Court Ruling of 19 June 2023 - ROJ: Constitutional Court Ruling 68/2023, ECLI:ES:TC:2023:68, Resolution No.: 68/2023, Appeal No.: 159/2019, Section: 1. Rapporteur H. E. Mr Juan Carlos Campo Moreno.

### Legal grounds.

Analysing Constitutional Court Ruling 68/2023, the constitutional doctrine on the right of access to the essential elements of the proceedings related to the deprivation of liberty. The Court has had occasion to examine various aspects of the right of access to the elements of the proceedings that are essential to challenge the deprivation of liberty in numerous judgments, all of them referring to the situation of police custody and also in those referring to the precautionary deprivation of liberty judicially agreed in cases in which the secrecy of the proceedings has been decreed (Art. 302 Lecrim).

With regard to what is relevant for the resolution of the present amparo action, following the summary set out in Constitutional Court Ruling 30/2023, the doctrine established by this Court can be summarised as follows: a) The starting point of the constitutional doctrine is the realisation that, together with the right to information and access to the investigation which, in general, corresponds to any person under investigation or accused (Art. 118.1 Lecrim), the procedural law establishes specific requirements in the case of a detainee or prisoner (Art. 520.2 Lecrim). b) The catalogue of rights of the detainee or remand prisoner establishes a special informative rigour, since, in accordance with Art. 520.2 Lecrim, "[e]very detained or imprisoned person shall be informed in writing, in simple and accessible language, in a language they understand and immediately, of the facts attributed to them and the reasons for their deprivation of liberty, as well as the rights to which they are entitled". Among these rights is the right of access to the elements of the proceedings that are essential to challenge the legality of the detention or deprivation of liberty [Art. 520.2 d) Lecrim], which acts as an instrumental guarantee of the right to information. Both aspects, information and access, are intertwined as guarantees of the right of defence against precautionary deprivations of liberty and serve the ultimate purpose of protecting against arbitrary deprivations of liberty, where judicial control of the measure is essential. c) The full enjoyment of the rights of information and access may be temporarily compromised by virtue of the secrecy of the proceedings. In these cases, the defendant's rights and guarantees are limited in order to preserve other interests worthy of protection, such as the success of the investigation or trial, or even the life, liberty or physical integrity of another person. However, we have noted that, when it is a case of an investigated or accused person in an effective or potential situation of deprivation of liberty, the Law excludes from this possibility of temporary restriction of rights the specific knowledge of the facts with which the investigated person is charged and the reasons for the deprivation of liberty, as well as access to the essential elements of the proceedings to question and challenge the legality of the deprivation of liberty. In particular, "the secrecy of the investigation will have to coexist in these cases with accessibility to the case file that restricts the level of knowledge by the person under investigation of the result of the investigation to that which is essential - in the sense of substantial, fundamental or elementary - for an adequate exercise of his defence against deprivation of liberty".

Having said this, and trying to apply this doctrine to the specific case, we can observe how in the context of preliminary proceedings opened and declared secret prior to the appellant's arrest, the investigating judge agreed, at the request of the Public Prosecutor's Office, to remand the appellant in custody, without bail, at the adversarial hearing held after he was brought before the court as a detainee (Art. 505 Lecrim). During the hearing, when he was given a statement and when questioning the Prosecutor's cautionary proposal, both the detainee and his lawyer stated that he did not know what

specific acts he was accused of and that, given such global accusations as those made against him, he could not answer about what he had or had not done. The detainee's lawyer opposed the precautionary measure requested by the public prosecution on the grounds that she was unaware of the facts on which such a request was based, reiterating that with the little she knew of the case, due to the previous declaration of secrecy in the preliminary investigation, there was no basis for remanding the detainee in custody. The same or similar arguments, with express mention of the right of access to the proceedings, were made in the appeal against the order ordering pre-trial detention, and in the subsequent hearing of the appeal. Thus, it was argued that the secrecy of the proceedings made it extremely difficult for the party to make allegations about the existence of sufficient evidence of criminality and the alleged relationship with other criminal organisations of which he was accused, without even knowing to which organisation he allegedly belonged. The appeal court ruled out that the alleged injury had occurred, stating that in the part of the appealed order not notified to the appellant or to his defence because the case was declared secret, specifically in its second legal basis, sufficient *prima facie* evidence of criminality against the accused is described, adding the following: "There is no doubt [that] when the secrecy is lifted, he will be able to fully exercise the right of defence and challenge those jurisdictional decisions that he understands to be unfounded or not in accordance with the law. In any case, it can be deduced from the testimony submitted that the content of the telephone tapping, the surveillance carried out and the bank documents substantiate the evidence of the two offences with which he is charged, the appellant being a person of great importance within the criminal organisation, which is attributed to him and whose activity is specified in the second legal reasoning - burglary, smuggling, forgery, money laundering".

In view of the circumstances of the case and in accordance with the constitutional doctrine already expressed, we find that the appellant's rights to personal liberty (Art. 17.1 CE) and the right to a defence (Art. 24.2 CE), inasmuch as he has been absolutely denied access to the essential elements of the case file that allow him to effectively oppose and challenge the precautionary deprivation of liberty.

With the declaration of nullity of the court decisions by which the defendant was deprived of his liberty, the Constitutional Court understands that his affected right has been remedied, without any other scope for the main proceedings.

## Conclusions

The always difficult balance between the secrecy agreed for the continuation of the investigation of a case when there is a person deprived of liberty, is resolved by the Constitutional Court in favour of the right to information on the facts and access to the proceedings, as a guarantee of the right of defence of the person under investigation.

In these cases, it would always have been better to declare partial secrecy of the proceedings and the appropriate publicity of those parts of the proceedings of which the person under investigation could have knowledge, without compromising the reason for the secrecy of the investigation. Let us consider that the person under investigation has been present at an entry and search procedure in which material elements of the crime have been found; *a priori*, there would be no point in hiding what he already knows. Let us consider a surveillance report that places several suspects in a compromised location; perhaps disclosing its existence would not compromise the investigation either.

Let us not forget either that this situation, so compromised with fundamental rights, has already happened to the Judicial Police when they have read the rights of a suspect and have not known which parts of the whole could really be revealed without affecting the judicially declared pretrial secrecy, from which it is clear, and more so in these cases, that the necessary coordination of the Judicial Police with the Investigating Judge is vital to overcome this obstacle of lack of information and access to the proceedings for the investigated person and his procedural representation, without compromising the procedure declared secret in whole or in part.





**Revista Científica**  
del Centro Universitario  
de la Guardia Civil

Revista  
**LÓGOS**  
Guardia Civil

