

Research article

Human rights jurisprudence and road safety outcomes: the ECtHR's impact on European traffic policy

Seyed Hesamoddin Lesani^{1,a} 

¹Hazrat-e Masoumeh University, Iran

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This article examines the European Court of Human Rights (ECtHR) approach to enhancing road safety across Europe in implementing the right to life under Article 2 of the European Convention on Human Rights. By analyzing formative judgments such as *Smiljanić v. Croatia*, this article demonstrates that the Court has slowly begun recognizing road traffic risks as an issue impacting the right to life by imposing substantive and procedural positive obligations on states. This article argues that the ECtHR's jurisprudence establishes structural standards to prevent dangerous driving, build public confidence, and ensure that states can build their capacity for preventative work in the area of road safety.

1. Introduction

Road safety is one of the cornerstones of public health and sustainable development, and is also critical in addressing issues of unnatural mortality, financial losses, and improving the quality of life of citizens. Despite progress in the legal and technical fields, Europe is still faced with a significant challenge associated with road traffic fatalities. The latest report from the European Commission, from 2023, shows that across the EU Member States more than 20,400 people died as a result of road traffic accidents in the EU, equivalent to 46 deaths for every one million inhabitants (or 4.6 per 100,000 population) (European Commission, 2024). Another source (European Federation of Road Traffic Victims (2023)) noted that at least 150,000 people sustain permanent disability as a result of traffic accidents every year. On average, for each road traffic fatality, four people are severely disabled, ten incur a traumatic head or spinal injury, and forty sustain less severe injuries (European Road Safety Observatory, 2024). Although these numbers are lower than pre-

COVID-19 levels, the rate of reduction is not currently aligned to meet the European Union's goal to halve road traffic fatalities by 2030 (European Commission, 2024).

Since governments have specific responsibilities to legislate, design roads, and enforce compliance with safety, it is necessary to identify the obligations of governments in road safety within a human rights framework. The European Court of Human Rights (hereafter ECtHR), as the court responsible for monitoring compliance with the European Convention on Human Rights (hereafter ECHR) within the European system, is uniquely situated to do this assessment. The ECtHR uses a "living" interpretation of the ECHR, developing and interpreting the provisions to account for changes in attitudes and needs (Nussberger, 2020).

One of the significant legal concepts that the Court has developed in recent years has been a notion of states' "positive obligations" to protect fundamental human rights. Positive obligations are understandings that states

^a Corresponding author: lesani77@yahoo.com

must not only abstain from violating rights, but they must take positive steps to protect against violations by third parties or as a result of shortcomings in their systems. In a number of cases, such as [Oneryıldız v. Turkey \(2004\)](#); [Budayeva and others v. Russia \(2008\)](#), and [Keenan v. the United Kingdom \(2001\)](#) the Court has recognized the responsibility of states to take preventive measures in areas such as explosions at waste-collection sites, natural hazards, and the mental health of prisoners.

The ECtHR's direct engagement with road safety is a new development, triggered by the judgment in [Smiljanić v. Croatia \(No. 35983/14, 2021\)](#). The case concerned the Court's finding that the Croatian government had breached its positive obligations under Article 2 of the ECHR (the right to life) because of its poor oversight of a driver with a history of dangerous driving conduct. For the first time, the Court stated that states need to prevent the repeat of high-risk behavior and utilize the tools available to them (like license suspensions, medical assessments, and other structural warnings). This judgment established the means by which road safety sits within the framework of states' human rights duties; it represented a significant development within the Court's evolving jurisprudence.

In this context, the present article will focus on three central questions: First, how did the ECtHR's recent case law—especially the judgment in *Smiljanić*—facilitate improvements in terms of road safety across member states? Second, have governments, as a result of this recent case law from the ECtHR, only pursued superficial changes in the form of corrective guidelines, or have changes been made to legislation, prevention measures, public education, and accountability? Third, how have European regional bodies—e.g., Council of Europe, European Commission—reacted to the Court's expansion into the area of road safety?

The aim of this article is to examine these questions through a human rights lens as well as to examine the legal and policy implications

of the *Smiljanić* judgment in the area of road safety, and if it has created any impact on road safety policy at national and regional levels.

2. Methodology

This research adopts a qualitative approach and employs an analytical-interpretive method to investigate the positive obligations of states under Article 2 of the ECHR in the context of road safety. The structure of the research is organized into three main phases:

The first phase examines the conceptual and legal foundations of the doctrine of positive obligations through doctrinal analysis. To this end, it evaluates the case law of the ECtHR to clarify the Court's interpretive approach regarding states' duties to prevent threats to life caused by third parties or systemic failings.

The second phase is centred around a thorough analysis of the Court's significant judgments, particularly the *Smiljanić v. Croatia* case. This section provides a systematic analysis of its legal reasoning, the facts of the case, and the structural implications in order to identify the Court's expectations of states in relation to road safety.

The third phase is a policy-oriented evaluation of the responses of particular member states of the ECHR to the Court's jurisprudence. It will evaluate if states have amended their laws, enforcement and oversight after the issuing of these judgements. The presence of the Court's case law at the level of the regional European institutions (European Commission, Council of Europe) is also assessed to illustrate the wider structural effects of the Court's decisions on road safety at the regional level.

Overall, this article is attempting to build a genuine bridge between human rights and public policy. It builds on the legal literature of states' positive obligations while also providing concrete human rights-based recommendations for road safety.

3. The concept of positive obligations of the state under Article 2 of the ECHR

3.1 Introduction to Article 2 and the right to life

The right to life is the most basic and fundamental of all human rights, and as such is a key element of many international and regional human rights instruments (United Nations, 1948). Article 2 of the ECHR also highlights the importance of the right to life. The ECHR considers the right to life to be the basis of the protective system of this Convention and a condition of the enjoyment of all other rights and freedoms it guarantees (Ovey & White, 2021, p. 34).

Given its strategic meaning, the ECtHR has continuously viewed Article 2 as a fundamental aspect of the democratic public order of Europe and has stated that the obligation to respect the right to life is absolute and non-derogable (McCann and others v. the United Kingdom, 1995, para. 147).

Article 2 is made up of two main parts: the first paragraph imposes a duty on states to secure effective legal protection to the right to life of individuals; the second paragraph permits lethal force to be used only in three tightly defined situations: in defence of persons from unlawful violence, to effect the legal arrest of a person resisting arrest, in the course of lawful suppression of a riot or insurrection and only where such force is "absolutely necessary." The Court has always adopted a restrictive approach in interpreting these exceptions (Guide on Article 2 of the ECHR, 2023, pp. 6–7).

Article 2 is generally regarded as non-derogable under the ECHR. Article 15 of the ECHR allows for exceptions that arise only when there are deaths resulting from lawful acts of war during times of armed conflict. This means that states cannot derogate from Article 2 in armed conflict or states of emergency except for deaths that result from lawful acts of war (but, only in accordance with the elements of international humanitarian law's, including the principles of proportionality, distinction,

etc.) (Milanovic, 2011). In *Hassan v. the United Kingdom* (2014), the Court determined that even in armed conflict, Article 2 must be interpreted in harmony with the rules of international humanitarian law (para. 104).

As far as personal jurisdiction, states have to protect the right to life of persons within their jurisdiction, which in many circumstances has exceeded territorial limits. In its case law, the ECtHR has developed the principle of 'effective control' that can be the basis of a state's extraterritorial jurisdiction (*Issa and others v. Turkey*, 2004). In a number of cases, such as *Al-Skeini and Others v. the United Kingdom*, the Court has also explicitly recognized that a jurisdiction arising from 'effective control' may engage extraterritorial jurisdiction for member states, in effect making the obligations under Article 2 applicable beyond the boundaries of the states (Wilde, 2013, 645647).

As far as substantive scope, the Court does not interpret Article 2 to be only prohibiting arbitrary deprivation of life. It also includes positive obligations by states. In *L.C.B. v. the United Kingdom*, the Court made it clear that if a state knows, or ought to have known, of a real and immediate risk to another person's life, the state has an obligation to take preventive operational measures (para. 36).

In general, through the Court's proactive and evolutionary interpretation, the scope of Article 2 has moved beyond the narrow compass of unlawful killings, and now includes areas such as the use of force, conditions in detention, access to medical assistance, natural disasters, public infrastructure, and now, road safety more recently (Harris et al., 2018, p. 212).

3.2 Definition and elucidation of "positive obligations" in the case law of the ECtHR

The idea of "positive obligations" is arguably the most important interpretive innovation by ECtHR to secure effective protection of the right to life under the European human rights system. This operates in contrast with "negative obligations." Negative obligations

require states to refrain from directly interfering with individuals', especially people's, right to life, but positive obligations require states to take proactive steps to protect human life (Harris et al., 2018, adapted, p. 217). This distinction has been integral to the interpretation of Article 2 of the ECHR and has been central to the development of some of the most significant substantive rights in the Court's case law (Leach, 2017, pp. 169–170).

The groundbreaking case of *McCann and others v. the United Kingdom* (1995) concerned an instance of the negative obligation, where the Court examined the use of deadly force by security forces in terms of necessity and proportionality (para. 149.) The watershed moment in the development of positive obligations came in *Osman v. the United Kingdom* (1998) where the Court stated that where the authorities are aware of the imminent risk of a third party killing a person, the state has a duty to protect the person from killing (para. 115). This case established positive obligations as an accepted category of the right to life in the Court's analysis.

In terms of positive obligations under Article 2, a variety of formulations can be found in the ECtHR's case law which essentially differentiate them into two categories: substantive obligations and procedural obligations. The substantive positive obligation requires a state to know any threats to life and to set in place suitable protective measures to avoid these risks. The positive obligation can arise in a variety of situations including road safety, health systems, environmental matters, natural disasters, and firearm safety, among others. An example of a substantive positive obligation relates to the case of *Oneryıldız v. Turkey* in 2004. The *Oneryıldız* case involved the explosion at a landfill site, resulting in a number of deaths, with the Court holding the Istanbul Municipality had neglected to act with safety standards. The Court found that Turkish authorities did not take measures that they should have against dangers, which were to them, obvious risks to persons, and as such, were negligent in their duty to prevent loss of life (para. 101). The case

of *Budayeva and others v. Russia* (2008) is a further example involving the Russian Government's negligent failure to provide adequate protective measures regarding a landslide in the Caucasus (para. 136).

States have a positive procedural obligation to conduct effective, transparent, and independent investigations into any suspicious deaths. In *Šilih v. Slovenia*, the Court stated that effective investigations can be a requirement even if the death took place before the ECHR entered into force (para. 159). It should also be noted that the Court reiterated this obligation in a military context abroad, as demonstrated in *Al-Skeini and Others v. the United Kingdom* (para. 163).

For the past decade, Professor Stoyanova has developed a systematic examination of positive obligations through the framework of a three-phase theory of "risk-knowledge-failure." In this model, the states can be held liable for breaches of Article 2 if it can be shown that (1) there exists, or existed, a real or potential risk; (2) the states had knowledge of, or should have had knowledge of, the risk; and (3) the states failed to take reasonable steps to mitigate the risk (Stoyanova, 2020, p. 613). Importantly, this model is applicable in realms like road safety, where technical knowledge and structural mitigants are possible. Stoyanova notes that in practice, the court has lessened the burden that required the claimant to present unequivocal fault and accepted that the lack of a safety infrastructure or effective supervision could suffice to prove a breach (Ibid, p. 617). Hence, the court's case law has ventured into not only areas like natural hazards, environmental issues, organized crime, or domestic violence, but also recently broached technical high-risk areas like transportation safety (Leach, 2017, pp. 178–180).

In areas of public policy, positive obligations have connected human rights with respect to public policy and determined through a structural analysis that states must present activator, transparency, and accountability to human security.

3.3 The development of the concept of positive obligations in the case law of the ECtHR and the foundation for its connection to road safety

The ECtHR has used a strategy of “dynamic interpretation” over the last few decades to develop the notion of positive obligations on states under Article 2 of the ECHR in a way that has broadened the scope of Article 2 into completely new areas. This development shows how the Court has moved away from a traditional model where it only prevents arbitrary deprivations of life to an active model of preventing emerging threats to human life. Emerging threats to human life include protection from the dangers of domestic violence, organized crime, environmental pollution, public health emergencies, natural calamities, and road safety, to name a few. From the perspective of the Court, to make the right to life effective, states must adopt responsible preventive behavior against risks arising from natural phenomena, legal failures and legal frameworks, administrative arrangements, or behavior of third parties (Gurash, 2025, p. 16).

Based on this interpretation, adequate laws do not represent the only obligation - it is sufficient to have mechanisms in place to enforce the laws, as well as to be in a position where risks could have been anticipated and responded to in a timely manner as part of fulfilling the positive obligation. For example, in *L.C.B. v. the United Kingdom*, the Court stated the obligation of the State does require being aware of actual or potential risks, assessing them, and taking any appropriate steps (para. 41). This assessment was later endorsed in several opinions, including *Keenan v. the United Kingdom* (para. 91).

In this regard, the Court has held states responsible for not only their direct actions but also for their failure to prevent, to prepare for, and to address the risks in many cases involving unintended disasters or accidents resulting from technological developments. For example, the 2012 ruling in *Kolyadenko and Others v. Russia* concerned a flood that occurred when the dam broke in a residential

area and held the Russian state responsible based on the lack of proper foresight and complete absence of any warning or adequate advance warnings given to residents (paras. 171, 178). In *Brincat and Others v. Malta*, the Court upheld that the Maltese government was responsible for the failure to protect its workers against the danger of exposure to asbestos, even though the origin of the danger was in the private sector (para. 106).

With these judgments in mind, it is evident that the concepts of “structural risk,” “state awareness,” and “failure to act reasonably” remain central elements of the Court’s assessment (Stoyanova, 2020, pp. 612–614). These concepts are particularly applicable in the field of road safety, which typically involves a confluence of structural risk, poor design, lack of oversight, and regulatory issues.

The transport system is a complex set of interrelated systems and components that support the overall movement of people and goods; thus, states have many duties towards maintaining safe roads. These duties include the maintenance or inspection of road quality, the placement of warning signs, the enforcement of speed limits, management supervision of the performance of some vehicles and companies, public education initiatives, legislation development, driving standards regulation, provision of post-accident assistance, and others. If we were to consider the principles arising from the jurisprudence of the Court, where a state knows, or ought to know, of risks that arise from shortcomings in the above systems and components and fails to take effective measures to avoid or lessen those risks, then the state could be liable for violations of Article 2. For example, we can imagine if there was a rural road that had a dangerous curve that caused frequent accidents because there were no warning signs and the state did nothing, then if there were to be a fatal accident again at that location, the state’s positive obligations under Article 2 would be triggered. This is where the frame of reference for “risk-awareness-failure” comes into play in order to establish the state’s liability. (Ibid, p. 616).

4. Analysis of the court's judgment in *Smiljanić v. Croatia* and its role in the development of the Court's case law on road safety

4.1 Case overview

Early on July 7, 2012, at a central intersection in Zagreb, the driver, Mr. D.M., entered an intersection on a red light and collided with a young motorcyclist crossing on a green light, resulting in the immediate death of the motorcyclist on the spot ([Smiljanić v. Croatia, 2021, paras. 5–7](#)). Police tests confirmed that the driver had alcohol in his blood and that he had a valid driver's license (Ibid, paras. 7-8).

Reviewing the driving record for the driver, there were at least 35 registered entries in the police computer system regarding offenses such as speeding, alcohol, and ignoring signals. All of these led to punishment from fines of 100-1,000 kunas, two temporary suspensions, and one alternative sentence of social punishment in the past ten years. In some instances, files were closed for statute of limitations or administrative mistakes (ibid., paras. 5-9).

In spite of these troubling records, however, there were no proper deterrence mechanisms put in place by relevant authorities to stop recidivism or to reinforce the penalties for this driver. The fatal collision initiated criminal proceedings against him for the offense of dangerous driving causing death, an offense for which he is deemed in Croatian domestic law to have acted purposefully. Possible sentences are jail terms (Ibid, paras. 92-93).

The family of the deceased issued a complaint to the ECtHR, alleging that the Croatian state had violated its positive obligations under Article 2 of the ECHR and was unable to protect the lives of its citizens against a likely risk. They alleged that the public authorities should have put into effect a permanent revocation of the driving license, a periodic evaluation of mental health, mandated training, and enforced conduct with a deterrent penalty for driving, which would

be expected given the demonstrated history of offenses (Ibid, paras. 60-61, 74-75).

In their complaint, the applicants cited the Court's case law in *Osman v. the United Kingdom* (1998) which asserts that states are liable when they knew (or should have known) of a risk and did not take appropriate action. The applicants claimed that the accident was not a result solely of the individual fault of the driver but a denouncement of the inadequate structural response and effective supervision from Croatian state authorities (Ibid, para. 85).

4.2 Analysis of the Court's reasoning

The ECtHR examined the victim family complaint and, in referring to Article 2 of the ECHR decided, that the Croatian authorities had not constructed an effective mechanism to monitor and manage high-risk drivers which Court found to amount to a breach of the right to life (Ibid, para. 66). The Court reiterated that the state's obligation does not simply stop at making laws, but also includes the "practical application and enforcement" of those laws "in particular, in relation to someone who has a dangerous record and a high likelihood of repeating that behavior."

When examining the Croatian government's obligations, the Court identified three essential characteristics to use as evaluative criteria. First was "awareness" - that is - it must be established that the state knew or ought to have known that an individual posed danger or risk to others. The driver's record of 35 traffic violations ought to have been recorded, evaluated, and responded to by the supervisory system (Ibid, para 76). Second was "foreseeability" - that is - given that the driver had consistently driven drunk and run red lights, it was totally to be expected that a fatal accident was so likely to happen that it must be considered to have been foreseeable to authorities. The Court stated at paragraph 66 that the event should not be regarded as simply an unexpected accident at all. Finally, was "inaction", which is - public authorities including the police, executive, or judiciary, did not take any measures in the face of this risk whether effective or deterrent. More

importantly, this passive state of affairs, particularly with reference to an individual with this history, was a violation of Article 2 (Ibid, para 83).

The Court then drew a distinction between the two aspects of Croatia's positive obligation—the substance aspect and the process aspect. With respect to the substance aspect, the Court stated that the government's decision not to take structural measures—such as a suspension of the offender's driver's license, medical examinations of the driver, or mandatory driver training—demonstrated that the government failed in its preventative protection of the right to life (Ibid, para. 66). Regarding the process aspect, the Court looked to whether there was an effective, open, and timely investigation into the incident. The ultimate outcome revealed that the failure of timeliness in the investigation, the inadequacies of the investigation, and the absence of an effective deterrent resulted in the government violating its process obligations (Ibid, paras. 99–102).

In sum, the Court determined that Croatia met all three components of "knowledge, foreseeability, and inaction" and therefore, violated Article 2 of the ECHR in relation to both aspects of its positive obligations (the structural prevention of the risks and an effective response once the incident occurred).

4.3 Comparison with previous judgments

In interpreting the importance of the Court's ruling in the Smiljanić case, it will help to compare it with four important earlier judgments of the ECtHR, which will illustrate how the Court has expanded the criteria in later judgments to determine the liability of a state for foreseeably dangerous situations and risks.

In the 2018 case of *Fatih Çakır and Merve Nisa Çakır v. Turkey*, the applicants made claims against the Turkish government on the basis that it had failed to ensure road safety, and this failing had led to a fatality. They submitted that the ongoing lack of maintenance, and failure to install adequate

safety measures - such as roadside barriers - led to their vehicle losing control and rolling into a water canal, leading to death (*Fatih Çakır and Merve Nisa Çakır v. Turkey*, 2018). The Court concluded that Turkey was in breach of Article 2 (right to life) because Turkey had not adequately held itself accountable for its negligence, failure to put in place corrective road safety measures, or subject the situation to serious scrutiny by its domestic courts (paras. 41-43).

In *Oneryıldız v. Turkey* (2004), several people died in explosions at a municipal landfill site. The Court pointed to weak oversight on the part of the Turkish government, noting that the state had an obligation to anticipate the dangers of methane gas accumulation and take whatever steps were necessary (paras. 71-74). While a private party's negligence triggered the explosions, the Court found that it was fundamentally the responsibility of the Turkish government to foresee the risk and do the proper planning (*Stoyanova*, 2023, p. 40).

In *Budayeva and others v. Russia* (2008), a major landslide in the Caucasus resulted in deaths and hundreds of people became homeless. The Court found Russia in violation of Article 2 due to lack of foresight, inadequate planning, and not taking precautionary measures to mitigate risks, notwithstanding the fact that the event was caused by a natural disaster (paras. 130-132). In the view of the Court, states had an obligation to provide structural protection within the right to life even against natural risks (*Sommario & Venier*, 2018, pp. 42–44).

In *Tomašić v. Croatia* (2009), a man with a history of violent offences released from prison murdered his wife, young child and then killed himself. The claimants argued police and courts with knowledge of this perpetrator's psychological and behavioral profile failed to take preventative action against this offender. The Court found their negligence constituted a violation of Article 2, noting the perpetrator's risk-propensity and knowledge on the part of authorities

constituted legal responsibility for the failure on the part of Croatia (paras. 49–51).

The areas in which these four decisions share commonalities with the Smiljanić case lie in the “prior knowledge,” “predictability of risk,” and “Lack of State negligence” criteria. In all four cases, the Court ultimately held the States liable, despite the danger being from non-state or uncontrollable factors in nature or private individuals. What mattered was the State’s prior knowledge of the risk and their lack of appropriate action to address that risk. In the Smiljanić matter, mum’s the word in regard to D.M. and the recorded traffic violations in the comprehensive file led to a clear indication from Croatia regarding the very real danger. This example also shows that in all cases, the Court applied the same analyzation framework, whereby State responsibility was established when a real risk existed, the State was or should have been aware of that risk and did not respond to alleviate it. This framework works similar in Smiljanić to the foregoing cases despite the subject matters being different.

Nonetheless, the difference in the Smiljanić decision is the focus on not an uncommon or unusual risk but rather a well-recognized and common area (road safety). The Court specified in its decision that it was disregarding the actions of high-risk drivers, and it immediately posed a danger to life, and the state should be required to implement mechanisms of prevention in the absence of a referred incident. This is different from Tomašić, on domestic violence, or Oneryıldız or Budayeva, on large-scale public disasters, respectively; the violation of Article 2 in Smiljanić arose from ongoing acts of structural negligence.

Of course, there are also subtle differences between these cases. In Öneriıldız and Budayeva, the structural or natural hazard was largely beyond individual control and took the form of disasters that the state could have become aware of and prevented on the basis of technical studies. In Smiljanić, however, the deficiency stemmed from the lack of continuous monitoring of an individual

whose record showed a consistent history of offences. Accordingly, this judgment emphasizes the collective nature of control and the supervision of the public sphere, and more clearly underscores the necessity of both individual and systemic measures.

4.4 The Court’s innovations in the Smiljanić case

The Court’s ruling in the Smiljanić case can be seen as a landmark case in terms of building upon the idea of the states’ positive obligations concerning the right to life. The Court was able, for the first time, to directly apply Article 2 of the ECHR in a new area - namely, road safety - and highlight the structural responsibility states have over the behaviors of high-risk drivers (Đuras, 2021, p. 534). While previously the majority of valid judgments under Article 2 were on the issue of natural disasters or organized violence, the Court identified threats from dangerous individual conduct that were cloaked by a dysfunctional system as an infringement of Article 2 right to life.

Another novel change is the shift from individual accountability to institutional accountability. The Court articulated that if the context does not have supervision, systemic negligence and administrative mistakes, and risky individual behavior such as driving under the influence occurs, accountability does not appear to only rest with the individual but rather with the state’s institutional framework (Ibid, p. 543). In this sense, hazardous acts committed by citizens that an inaction of public institutions allowed to persist over time can become an accountability of the state.

In addition, the Court’s decision emphasized that there should be a repeating cycle of information collection, analysis, and structural response. Fines and temporary driving license restrictions only go so far—the state must monitor drivers’ violations through a database and then impose graduated measures, depending on the level of risk, that represent the various levels of risk, such as medical exams, mandatory training, and long-

term driving restrictions ([Smiljanić v. Croatia, 2021, paras. 64–66](#)).

In addition, the Smiljanić judgment has three essential structural implications for public policy: the first is the need for explicit and continuous training for public officials, training law enforcement and judicial actors; Article 2 of the ECHR not only mandates the appropriation of laws but also the explicit training of the implementing agents so that they have latitude to adopt appropriate responsiveness to the response ability of the field ([Stoyanova, 2023, 211](#)). The second is the need for deterrence. The Court stated that unless there are strong supervisory measures like psychological assessments and long bans on licenses as penal measures, punishments will be received as not enough deterrence ([Smiljanić v. Croatia, 2021, at para. 66](#)). The third is the relevance to social trust. The Court cautioned that when danger-related breaches go unattended and there is no effective outcome thereafter, social distrust develops. Therefore, an effective road safety system has not only a technical aspect but also a social aspect ([Đuras, 2021, 541](#)).

Ultimately, the Court regarded this decision as an interpretative evolution of Article 2 and that public safety - especially in relation to transportation - has a direct connection to the right to life. This ruling provides an unambiguous message to states: the right to life requires institutional readiness, structural responsiveness, and ongoing accountability. Thus, the Smiljanić decision is pivotal not only in terms of road safety but also in the broader framework of state responsibility.

5. The impact of the ECtHR' case law on the advancement of road safety in Europe

5.1 The impact of the ECtHR' case law on member states' obligation to undertake "structural reforms" in the area of road safety

By utilizing a progressive interpretation of the ECHR, and its rights especially Article 2, the ECtHR has expanded the reach of fundamental

rights into new areas such as road safety. This approach, sometimes called the "living instrument" doctrine, holds that the ECHR must be interpreted in light of the current state of things, including international social, scientific, or technological developments. ([Nussberger, 2020, p. 76](#)) Accordingly, risks that were not envisaged at the time of the ECHR's adoption in 1953—such as natural disasters, catastrophes resulting from waste accumulation, and road traffic accidents—now fall within the scope of Article 2.

The Court has employed a number of different interpretive principles, including "margin of appreciation" where states have flexibility to accommodate human rights norms considering their own domestic circumstances. However, the principle of margin of appreciation is not an all-too-simplistic approach. Where there already exists a strong consensus among greater member states - such as may be the case with regard to a comprehensive road safety monitoring system - the other states need to take action which must conform with standards established by the majority. As argued, the measure of domestic particularity cannot be used to justify a refusal of compliance with the legal obligation to protect the right to life. (*Ibid*, p. 88)

On this basis, the Court has provided a legal framework, by establishing legal concepts, that requires the states to engage in structural reforms in transportation. Said structural reforms include electronic surveillance, shared databases to be used among traffic authorities, police, judiciary, and insurance agencies, and monitoring indicators for responsible agencies. The area of high-risk drivers, such as public police or service persuaders, is markedly emphasized in the role of public prosecutors.

Research through field studies further supports the changing jurisprudential state of the ECtHR. All research studying judicial policies aimed at reducing road fatalities illustrated the necessity of having the judiciary joined with the legislature and police. ([Redelmeier et al., 2003, p. 2179](#))

Another significant change is the transition from an individual-centered model to a structural-based model in assessing state responsibility. The judgment of the Court is based on case law, which postulates that a state must answer for both the actions of its agents and "structural risk." Structural risks are risks associated with systemic flaws in state institutions, as opposed to individual or incidental risks. For example, whether there was a failure in the driver's licensing system, if dangerous violations were not being recorded, or if there was no mechanism for effectively deterring drivers who had a record of serious violations. (Dembour, 2015, p. 241)

The ECtHR has made it abundantly clear in a number of recent cases that inaction could, in some circumstances, generate a violation of the state's positive obligation to protect the right to life effectively. In *Smiljanić v. Croatia*, the Court emphasized that due to the driving history of the individual who had engaged in high-risk driving numerous times, the failure of the judicial and police authorities to respond adequately, and the history of high-risk driving, resulted in it concluding that there was a systemic failure of the supervisory and accountability system. The Court stated that the failure to impose reasonable and effective restrictions on high-risk drivers was not simply administrative error but a violation of Article 2 in its positive dimension (Smiljanić v. Croatia, 2021, para. 66).

Recent academic research also corroborates that the structural responsibility model is a strategy for the reduction of traffic and road casualties. A 2019 study by the Organization for Economic Co-operation and Development (OECD) described how countries with a "full registry of high-risk drivers" and "a multi-level monitoring infrastructure" showed a considerable reduction in deaths from road traffic accidents over a period of ten years (OECD, 2019, p. 22).

In the end, and as some have noted, structural responsibility is another way to characterize "preventive justice," where human rights are moved beyond the legal discourse and into the space of public policy

and risk management (Mantouvalou, 2020, p. 21). This issue of conceptual and institutional change, especially in key issues such as road safety, has an incredible amount of promise in acting as a pathway to institutionalizing good policy and reducing human deaths.

5.2 Case study—the impact of the ECtHR's case law on enhancing road safety in European countries

In accordance with the case law of the ECtHR regarding states' positive obligations in general—and road safety specifically—many European governments have introduced legal and institutional reforms in their transport sectors. Such measures may be understood as direct and/or indirect responses to the evolving jurisprudence of the Court.

In 2023, the Croatian government passed a new law that requires permanent revocation of driving licenses for individuals who have more than 20 traffic offenses within any five-year period. The same legislation also included mandatory medical assessments every year for high-risk drivers (Croatian Ministry of Health, 2024, No. 51/2024). Croatia has also joined the European Car and Driving License Information System to enable quick and coordinated sharing of information regarding high-risk drivers between member states (European Commission, 2024). Furthermore, in its National Road Safety Program, the Croatian government has suggested the elimination of the current tolerance of up to 10% for exceeding the legal speed limit and that it will reduce the legal blood alcohol limit for drivers, potentially from the current 0.5% to stricter thresholds, or even zero (Government of the Republic Of Croatia, 2022, Annex, p.6). Therefore, the evidence indicates that the jurisprudence of the ECtHR has undoubtedly influenced Croatia's governance framework and, more generally, its culture of traffic enforcement and regulation.

In Turkey, the Ministry of Transportation changed the rules related to issuing driver's licenses. Subsequently, the initiative "Have a Good Class, Mr. Driver" was born,

indicative of the shifting philosophy of the Turkish Government in relation to driver education and measures to prevent road safety violations. The initiative shows a degree of policy change regarding the educational competencies of drivers and builds awareness to reduce traffic accidents (Turkey, 2019, p. 104). Additionally, Turkey has had a number of overall road safety approaches respectively, including instruction for professional drivers, ticketing seatbelt use, monitoring speed & alcohol use, and a National Road Safety Action Plan, which has as its goal to reduce road traffic fatalities by 50% by the year 2020 (World Health Organization, 2019).

Italy has implemented an extensive national program of reforms during 2021 and through the complete reform of national road safety anticipated in the new Traffic Code, which was adopted in November 2024, and fully entered into force on 14 December 2024 (Law no. 177/2024). The changes impacted the points-based driving license scheme, the regulations surrounding traffic infringements, and the broader area of road safety. Among other measures, new restrictions for novice drivers mean that for three years from being issued their first driving license, they can now only drive cars that produce a maximum of 70 kilowatts (95hp). In addition, the legislation strengthened the requirement for “alcolocks,” obliging drivers with previous offenses to install alcohol ignition interlock devices (ETSC, 2024). The reforms have also imposed greater restrictions on the increasingly problematic and widely recognized use of mobile phones while driving, as penalties were considerably increased (fines up to €1,400) along with even larger penalty points and increased time periods for driving license suspensions (NSA Naples, 2024). New regulations were introduced with regard to electric scooters: mandatory insurance coverage, registration plates, reflective vests, indicator/turn signals, and a helmet rule that applies to all electric scooter users. Such provisions are intended to lessen accidents involving light vehicles and improve pedestrian safety, and the ban on speed enforcement cameras was lifted for roads with speed limits below 50 km/h.

new penalties for excessive speeding were instituted that will result in hefty fines, suspensions of drivers' licenses, and demerit points (DWF Group, 2025).

Since 2021, the Netherlands has been examining its legal situation regarding drinking and driving. The country had implemented an alcohol interlock program that was finally put on hold in 2015 after a ruling from the Council of State, the highest administrative court in the Netherlands (SWOV, 2022). However, there has been serious discussion over the 2024 bill, which could reinstate the use of alcohol interlocks for repeat offenders. Recent public opinion surveys reveal that 84% of Dutch citizens support the reintroduction of this measure, and the Parliament is also working on legislation that would make it compulsory for someone with previous convictions (European Transport Safety Council, 2023). In terms of technology and infrastructure, the Netherlands has been making significant strides in road safety. As of 2022, with the new EU regulation on advanced driver assistance systems (ADAS) including autonomous emergency braking, lane departure warning, and lane keeping assistance, new vehicles manufactured since 2022 contain these systems. There are over thirty specific technologies that are now either included or compulsory in vehicles under the regulations with all new cars containing these technologies from 2023 (RAI Vereniging, 2022). Additionally, as of 1 January 2023, in the Netherlands, helmet use has been compulsory for riders of light scooters and mopeds in all conditions. This legislative measure has contributed to a lesser number of fatalities in the use of such vehicles (SWOV, 2023).

After 2021, there has been a more serious discourse in Sweden advocating for mandated installation of alcohol ignition interlocks for drivers with prior offenses. This has been implemented in a voluntary capacity since 2012 as part of a rehabilitation program for individuals involved in alcohol-related accidents, yet surveys show that about 65% of the Swedish public and the majority of parliamentary representatives in 2024 believe

the system should be required for all vehicles and all drivers (MEKO Group, 2024). This demonstrates an emerging public and political interest in growing road safety through technological prevention.

Germany has drafted new legislative reform requirements for 2024 and 2025 regarding items like turn signals for micro-scooters, allowing micro-scooters in some pedestrian zones, and permitting light driving tests for rental users; these reform suggestions have already faced some criticism from civil society. Recommendations from the German Road Safety Council are to raise the minimum age for scooter riders to 15 years and to require turn signals and high-visibility clothing for safety (European Transport Safety Council, 2025).

5.3 The indirect impact of the ECtHR' jurisprudence on road safety policies in the European Union and the Council of Europe

In recent years, the ECtHR (ECtHR) has further expanded the reach of Article 2 of the ECHR and shifted emphasis, expanding road safety from a technical and transport consideration into human rights law. The European Commission's document related to the EU Road Safety Policy Framework for 2021–2030, published in June of 2019, aims to reduce road traffic deaths by fifty percent before 2030 and achieve "Vision Zero"—no road deaths by 2050, indicating a structural shift and embedding new road safety policymaking principles (European Commission, 2019). This document advocates for the prioritization of safe roads, safe vehicles, safe driver behaviors, and adequate post-crash care as a responsibility of governments and joint European institutions and aligns with positive obligations of the state under Article 2.

The European Parliament emphasized "Vision Zero" and the "Safe System Approach" in its report A9-0211/2021, elaborating on the roles of states and institutions to provide safety for citizens, closely linked to the positive obligations of states under Article 2 of the ECHR (European Parliament, 2021). This combination of a policy and human

rights represents the maximal reflection of the normative framework that the ECtHR is developing based on its prior case law, especially in Smiljanić.

Against this backdrop, on December 16, 2024, the Council of the European Union formally approved the amendment to Directive 2015/413 on international cooperation regarding information exchange related to road traffic offenses with respect to road safety. Although the amendment deals with various road traffic offenses, including offenses such as crossing a solid line, dangerous overtaking, leaving the site of an accident and ignoring emergency vehicles, the amendment bolstered the cooperation between countries while protecting the fundamental rights of people accused of road traffic offenses (Council of the EU, 2024).

In addition to legislative measures and government collaboration, the European Union has taken some measures to improve vehicle safety. One regulation was Regulation 2019/2144, which requires vehicles to have intelligent speed assistance and other technologies to help improve road safety and reduce accidents caused by speeding. This regulation notes that since 2022, motor vehicles in the EU are required to have such systems (European Parliament and Council, 2019). This technology requirement can be seen as consistent with the normative message from the ECtHR' case law of improving state ability to avoid deadly risks, which are inherent in traffic accidents.

In addition to the EU's legal documents, there are also technical and research documents that corroborate the EU's legal-political approach of improving road safety. A good example would be Directive 2008/96/EC concerning the "Management of Road Infrastructure Safety," which had been adopted by the European Parliament and the Council of the EU in 2008 and updated in December 2019 as a consolidated version, which remains in place. The main aim of this directive is to address fatal and serious injury accidents while improving road, tunnel, and bridge safety in the design stage. The

directive specifies that the requirements of vulnerable road users such as cyclists and pedestrians should also be considered in all phases of road safety management (European Parliament and Council of the European Union, 2019). According to the European Commission's official report, the road traffic fatality rate in the EU improved substantially from 2010 to 2020, falling by approximately 36%. A slight increase was observed as COVID-19 restrictions were eased, but the current rate continues to show a reduction of around 30-35% compared to 2010 (European Commission, 2023; European Parliament and Council, 2019). The holistic interpretation of Article 2 of the ECHR may have assisted in the success of that directive.

5.4 The convergence between the “Safe System” model and the ECtHR's positive obligations approach

The “Safe System” concept introduces a shift in how we think about policymaking for road safety. It is normative in that no road death or serious injury is acceptable, which means that the national transport system needs to ensure that the unavoidable human errors do not lead to fatal outcomes. So, Vision Zero and the Safe System sustain themselves on the basis that humans are inherently prone to errors and the system—not the individual—must assume primary responsibility because of our biological vulnerability (Johansson, 2009, pp. 826-827). If we speak physiologically, it is clear science that the human body's ability to withstand crash forces is limited in nature to comfortably shift responsibility from humans to the system. The report of the International Transport Forum (OECD) goes on to say, “the human body can only tolerate limited crash forces, and the system must be designed around this fact” (OECD, ITF, 2016, p. 27). So, the Safe System is not a set of independent measures, but a normative philosophy that is based on an ethics of responsibility and an understanding of human realities.

One of the most fundamental tenets of a Safe System approach is shared responsibility. This is unique to the Safe System, since

traditional approaches have placed almost all responsibility on road users, without taking into consideration people's inability to avoid error and biological vulnerability. Responsibility is assumed by a broader group of stakeholders, such as planners, engineers, politicians, traffic officers, medical facilities, vehicle manufacturers, and insurance companies, etc. (Fortin et al., 2018, p. 1). This is logically defensible, since “infrastructure, as designed, built, and maintained, impacts on safety—policies like speed limits are designed with safety in mind” (Ibid, p. 2). Therefore, while recognizing that road users must adhere to the rules, a Safe System approach would indicate that the responsibility for preventing deaths rests with the system designers.

Applying the Safe System theory illustrates a clear and meaningful relationship with case law from the European Court of Human Rights (ECtHR) in relation to road safety. As already discussed, Article 2 of the ECHR provides a right to life, and the Court has consistently held that this includes not just the State's negative obligations but also positive obligations. These positive obligations require States to take steps to prevent death when they are aware of a risk to life (Stoyanova, 2020, p. 613) and it is both reasonable and practical to do so, including in the context of traffic and road accidents. These legal obligations sit comfortably within the normative concepts of the Safe System, which, again, recognizes the State and public authorities as the system's “designers” who have a pre-eminent obligation to protect the lives of road users.

The Safe System is more than just a desirable policy objective; it is a strategic framework to protect the right to life, which means that, in the context of Vision Zero, there must be substantive changes in institutional responsibility and accountability, legislation, and infrastructure design (Schell & Ward, 2022, pp. 1-2). That logic is very much akin to the view taken by the ECtHR in the interpretation of the obligations of States under Article 2, which obliges governments to take legal, regulatory, and practical measures to protect life. As mentioned above, in relation to road safety matters, such as those

in *Smiljanić v Croatia*, the Court found that the States were under an obligation, pursuant to Article 2 of the ECHR, to enact and enforce appropriate legislation and take reasonable and practical steps to protect individuals from foreseeable risks to their lives. (Đuras, 2021, p. 534) This burden is nearly identical to the central tenets of the Safe System as articulated in the reports produced by the OECD/ITF, which states that managing speed, infrastructure, vehicles, users, and post-crash response must be addressed concurrently by governments (Fortin et al., 2018, p. 2).

In other words, through Article 2 of the ECHR, the ECtHR essentially requires States to practically implement Safe System principles. An example of the requirement to deploy alcolock devices for high-risk drivers (included in the road-safety agendas of several European countries, such as Sweden and the Netherlands) demonstrates a clear overlap between the legal obligations and Safe System thinking. With respect to human rights, States are required to take preventive and effective measures to protect life; with respect to Safe System, the system must be designed in such a way that the outcome cannot involve a death, even if a user makes an error (Johansson, 2009, pp. 828–829).

6. Conclusion

The structural shifts within national and regional policies, including direct and indirect indicators of human rights in processes of road safety policy-making in Europe, evidence the impact of ECtHR decisions on road safety in Europe through direct mechanisms and indirectly through the expansive interpretation of Article 2 of the ECHR. The Court's decision in the *Smiljanić* decision went beyond just a singular and tragic case in terms of a traffic accident; it marks the beginning of forming a more profound comprehension of state responsibility towards public risks. By asserting that road safety was now a positive obligation under Article 2 of the ECHR, the Court reminded states that prevention, monitoring of systems, and

reform of inefficient systems is part of the responsibility to protect a right to life.

This change in perspective—from negative duties to positive obligations and from responsibilities of the individual offender to considerations of structural risks—provides both a caution and an optimistic note. The caution is that ignoring systems and structural problems that generate harms at the scale of a major breach of state duties to protect life. The state can no longer be ignored or silent because the system, the roads, the vehicles, or the regulatory systems become dangerous; the state's response is not measured by responsibility as we traditionally think of it but fundamentally disregards the positive obligations owed.

At the same time, the ruling, by providing states—with Croatia as only one of many in Europe—with a clear normative signal about structural responsibility, prescribes a structural responsibility for governments to rethink how they license and revoke licenses, 6 to exercise increased vigilance over high-speed violations, 7 to build safer roads, and to make information-sharing among responsible institutions more transparent. The *Smiljanić* case illustrates an ability to move beyond just one case to influence regional levels of public policy including the European Union and the Council of Europe.

In conclusion, the ECtHR's experience in the *Smiljanić* case, which has had a significant and wide-ranging effect on road safety, indicates that emphasizing human rights in relation to public policies in areas like transport is less a matter of choice and more a necessity to realize justice and preserve human lives. This experience can be a positive model for other legal systems to conceptualize acknowledged risks as human rights threats and to begin addressing them.

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Seyed Hesamoddin Lesani: Conceptualization, Formal analysis, Investigation, Methodology, Writing—original draft, Writing—review & editing.

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