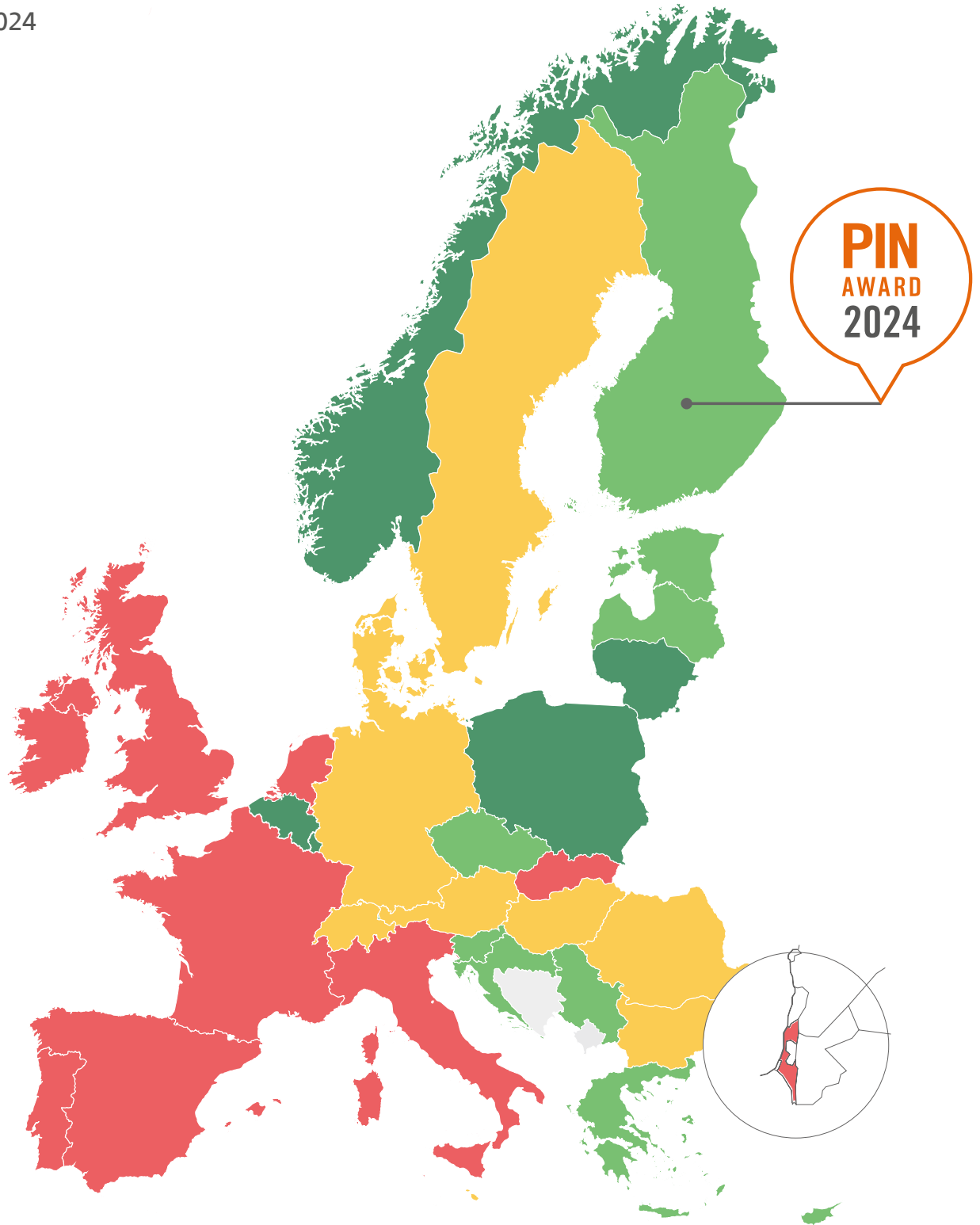


# RANKING EU PROGRESS ON ROAD SAFETY

18<sup>th</sup> Road Safety Performance Index (PIN) Report

June 2024



European Transport Safety Council

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# RANKING EU PROGRESS ON ROAD SAFETY

18<sup>th</sup> Road Safety Performance Index (PIN) Report

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June 2024

## ACKNOWLEDGEMENTS

For their assistance providing data, background information and expertise, the authors are grateful to members of the PIN Panel and Steering Group. Without their contribution, this report would not have been possible. Special thanks go to the co-chairs of the PIN programme, Henk Stipdonk and Heather Ward.

The PIN programme relies on panellists in the participating countries to provide data for their countries and to carry out quality assurance of the figures provided. This forms the basis for the PIN Flash reports and other PIN publications. In addition, all PIN panellists are involved in the review process of the reports to ensure the accuracy and reliability of the findings.

ETSC is grateful for the financial support for the PIN programme provided by the German Road Safety Council (DVR), Toyota Motor Europe, the Norwegian Public Roads Administration, the MAPFRE Foundation and CITA, the International Motor Vehicle Inspection Committee.

## ABOUT THE EUROPEAN TRANSPORT SAFETY COUNCIL (ETSC)

ETSC is a Brussels-based, independent non-profit organisation dedicated to reducing the numbers of deaths and injuries in transport in Europe. Founded in 1993, ETSC provides an impartial source of expert advice on transport safety matters to the European Commission, the European Parliament, and European Countries. It maintains its independence through funding from a variety of sources including membership subscriptions, the European Commission, and public and private sector support.

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## Professor Richard Allsop OBE, 1940-2024

We were deeply saddened that our dear friend and colleague Professor Richard Allsop passed away in January after a short illness.

Richard was a giant of road safety policy: one of the pioneers in the field of research on the effects of alcohol on driving, an advisor to the British government and a key figure in both the UK's Parliamentary Advisory Council for Transport Safety (PACTS) and ETSC. He was a friend, confidante and mentor to us, and many in the British and European road safety community.

As a board member, chair and later advisor to our PIN programme, we will remember Richard for his curiosity, keen intellect and incredible eye for detail but also his kindness, utter dedication and generosity. Richard made an invaluable contribution to every PIN report published by ETSC until the end of last year. He was such a pillar of ETSC for so long that it is hard to believe he is no longer with us.

He was born in 1940 and educated at Bemrose School Derby and Queen's College Cambridge where he studied Mathematics. There he worked with the UN Association, the Refugees Action Group and War on Want.

From 1973 to 1976 he was Director of The Transport Operations Research Group at Newcastle University before becoming Director of the Centre for Transport Studies at University College London, a post he held for some 20 years.

He led the University Transport Studies Group and developed strong links between the group and the UK Department for Transport. He became a Director of the UK Parliamentary Advisory Council for Transport Safety (PACTS), ETSC's UK member, in 1995 until 2015.

Throughout his career, he built a formidable reputation in the transport safety field through timely and meticulous research in areas such as drink-driving, seatbelts, signal-controlled junctions, risk and choice on roads, the safe system and the impact of the economic recession on traffic deaths.

He was a committed researcher, that wanted to see research leading to policy change, not sitting on the shelf.

As an academic he was highly regarded: "outstanding" was the view held by many. He became a powerful influence on policy development and the understanding of road safety.

But, beyond his many achievements, recognised by an OBE (a British order of chivalry) and his Emeritus Professorship, he possessed many personal qualities which made him much more influential than a dry account of his academic and policy work might suggest. He was always ready to help newcomers and the inexperienced with his kindness and wise counsel, going way beyond the normal courtesies. He may be summed up as an outstanding example of that rare commodity: a true gentleman.

It is no exaggeration to say that many people today owe their lives to Richard's quiet persistence and rigorous determination in the cause of road safety.

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# FOREWORD

Antonio Avenoso,  
ETSC Executive Director



Five years ago, in the spring of 2019, ETSC was in the mood for celebration. The EU had just finalised a political deal on a world-beating step forward in vehicle safety that is only now paying off. After years of wrangling over technical specifications, all new cars sold in the EU from July this year will feature a panoply of new safety technologies from automated emergency braking systems, to lane departure warnings, intelligent speed assistance and distraction monitoring. This sweeping change will save lives for years to come. The EU likes to sing about common charging cables and the end of roaming costs – but these will not save your life, or the lives of your children. Improved vehicle safety is one of the EU's greatest achievements.

Looking ahead in 2019, like everyone else on the planet, we had no idea what was to come. Covid, new conflicts in Europe, the Middle East and Africa – governments seemed to jump from one crisis to another, and it was no different for the EU institutions. Road safety took a back seat. Recently the EU Court of Auditors said 'progress is barely moving'. But road safety needs to be a priority once again. 100,000 people died on EU roads over the last five years, and 100,000 more will die over the next five if nothing changes.

Despite this difficult political context, we have seen a number of measures from the EU since 2019, that, taken together, will make a positive impact.

Driving and resting times rules will now apply to van drivers on international routes. It will become easier for Member States to sanction foreign drivers that commit road traffic offences, and more dangerous behaviours will be covered. Drivers and riders for online delivery and taxi platforms should be treated as employees, and be better protected. Hundreds of cities on the European road network will be required to formulate sustainable urban mobility plans – which includes a safety component. MEPs backed a number of measures the EU should take to improve road safety.

The news wasn't all good. The EU set a target in 2017 to halve road deaths in the decade to 2030. How are we doing? As this report shows, between 2019 and 2023, deaths declined by 10%. They needed to decline by more than double that to hit the 2030 target.

Those vehicle safety standards we mentioned? The minimum requirements for Intelligent Speed Assistance, Electronic Data Recorders and distraction warnings ended up too weak to bring all the hoped-for benefits. Drivers are also replacing their vehicles less often in response to the cost of living crisis, meaning new safety technologies will take longer to reach the whole fleet. The EU is also busy approving new assisted driving features that we think may increase the risk of driver distraction and disengagement.

In terms of new legislation, the flagship policy of a new 'road safety package' from the European Commission was a revision of rules on driving licences. There were some important improvements in there, notably on the issue of drink-driving. New drivers will be subject to a zero-tolerance alcohol limit in their first two years of driving. And, for the first time, alcohol-dependent people will be allowed to take part in alcohol-interlock rehabilitation programmes as an alternative to losing their licence after being convicted of drink-driving. That's an important change which will increase access to these essential programmes.

Unfortunately, following years of industry pressure, the new licensing rules could end up allowing children as young as 17 to drive lorries. ETSC has argued that would be a big mistake as data clearly show a much higher risk profile the younger a lorry driver is. The new proposals also include a plan to allow 16-year-olds to drive

cars that weigh up to 2.5 tonnes, as long as they are fitted with a speed limiter set to 45 km/h. The directive makes no mention of the likelihood that speed limiters could be tampered with. The Commission's impact assessment warned that this cohort of drivers could make road safety worse for cyclists and pedestrians. And, in an age where young (and old) people need to be encouraged to be healthier and more active, it runs contrary to what is needed. It will be up to a new European Parliament and Commission to shape a final deal on driving licences under the Hungarian EU Presidency later this year. We hope they reverse some of these unnecessary, and potentially dangerous changes.

In a briefing for incoming policymakers published in April, we called for an overhaul of the institutional approach to road safety in the EU, with the appointment of a Road Safety Envoy, reporting directly to the Commission President, to more closely align the work carried out across various departments. An EU road safety agency, with specific powers such as managing the roll-out of automated vehicles, and carrying out crash investigations, is also long overdue. While aviation, maritime and rail have dedicated EU agencies responsible for safety, there is no such agency for road transport.

Returning once again to the crucial topic of vehicle safety, ETSC is urging the Commission to start work on a new revision of vehicle safety regulations to account for rapidly advancing safety technologies and to push ahead with reforms to periodic technical inspections of vehicles to ensure these technologies are maintained over a vehicle's lifetime.

What will we have to say about road safety in Europe in five years? One thing is for certain, the European elections taking place as this report went to print really matter.

A disturbing trend of the last five years has been the rise of 'culture wars' around transport and mobility. There have been clashes over speed limits, speed cameras and low-traffic zones. The politicisation of road safety is not a new phenomenon, but it does feel that the tone of discussion has got worse recently. This makes little sense because there is not a family in Europe that hasn't been affected in some way by road trauma.

As we get to meet the new MEPs later this year, and start to talk to national government representatives and Commission officials about their new priorities, we will continue to do what ETSC has always done. We will talk about what works and what doesn't in road and vehicle design and in addressing poor behaviour by, and towards, all road users. We will urge politicians of all political colours to make the right decisions, based on hard evidence. Let's hope they listen, and road safety gets the priority it deserves.



# EXECUTIVE SUMMARY

The EU has set a target to halve the number of road deaths by 2030, based on their level in 2019. Most European countries have similar national targets.

Last year there were 20,418 deaths on EU roads. Unfortunately, this represents a decrease of only 1% compared to 2022, falling far short of the 6.1% annual reduction needed to achieve the EU target of a 50% reduction by 2030.

18 of the 32 countries monitored by ETSC's Road Safety Performance Index (PIN) Programme saw a decline in road deaths in 2023 compared to 2022. Malta led with a 38% reduction, followed by Luxembourg at 28%, Belgium at 11% and Hungary at 10%. Conversely, road deaths stagnated in two countries, and even increased in 12 countries, with Lithuania experiencing a significant increase of 33%, and Latvia's deaths increasing by 26%.

Compared to 2019, the baseline year for the EU 2030 target, 19 countries showed a reduction in road deaths by 2023. Poland and Cyprus lead the ranking with a significant decrease of 35%. Belgium and Denmark follow with reductions of 25% and 22%, respectively. Road deaths in Malta remained stable with a 0% change. Conversely, an increase in road deaths was observed in 11 countries within the same period. Notably, Ireland experienced an increase of 32%, while Switzerland saw an increase of 26%. Collectively, the EU27 achieved a decrease of road deaths of 10% in 2023 relative to 2019. However, to align with the EU's target for 2030, a reduction of at least 22% would have been necessary.

Between 2014 and 2023, the EU prevented 20,981 road deaths compared to the situation where each Member State had maintained the same number of fatalities as in 2013. However, it's important to note that an additional 52,754 lives could have been saved if the annual reduction of 6.7% required to achieve the 50% reduction target within a decade had been consistently reached.

The number of people recorded as seriously injured, based on national definitions, decreased in 22 of 30 PIN countries that collect these data

over the decade to 2023. In 24 EU Member States serious road traffic injuries were reduced by 10% on average over the period 2013-2023. The number of recorded serious injuries went down by 67% in Lithuania for the period 2013-2023, by 54% in Romania for the period 2013-2021, by 46% in Greece over the period 2013-2023 and by 43% in Cyprus for the period 2013-2023. The number of recorded serious injuries increased by 60% in the Netherlands for the period 2013-2022, 31% in Italy for the period 2013-2022 and 28% in Malta for the period 2013-2021.

## EU legislation on road safety

On 1 March 2023, the European Commission published proposals for three pieces of road safety legislation known as the 'road safety package': the revision of the EU driving licence directive, the revision of the cross-border enforcement (CBE) directive and a proposal for a new EU directive on driving disqualifications. In July of the same year, the Commission also published a proposal for the revision of the directive on the maximum weights and dimensions of road vehicles.

### Proposal for a revision of the driving licence directive

Elements of the Commission's original proposals were welcomed by ETSC including the proposed probationary period for novice drivers and the decision to allow drivers with alcohol abuse disorders to drive as part of an alcohol interlock rehabilitation programme.

ETSC remains concerned about the negative road safety impact of the Commission's proposal to reduce the age for accompanied driving for category C licence holders (lorries) to 17 years. The same concerns apply to the European Parliament's proposal to allow category D vehicles (buses and coaches) to be driven by 18-year-olds under certain circumstances.

Political negotiations will continue after the EU elections in June.

### **Proposal for a revision of the Cross Border Enforcement (CBE) Directive**

The Commission's proposal for a revision of the CBE directive aimed to further facilitate the enforcement of financial penalties against drivers who commit an offence in a different EU Member State to the one where the vehicle is registered.

ETSC welcomed the conclusion of negotiations on this proposal in April 2024. It must now be written into national law in EU Member States before coming into force.

### **Proposal for a new directive on the Union-wide effect of certain driving disqualifications**

This proposal states that driver disqualification should apply, in the future, in all EU Member States, not just the country where the driving offences were committed.

The Council is yet to publish its common position. Once the Council has reached its position and following the European Parliament elections in June 2024, negotiations can take place between the institutions to reach a final deal.

### **Proposal for a revision of the directive on the maximum weights and dimensions of road vehicles**

The Weights and Dimensions Directive 96/53/EC1 sets out maximum authorised weights and dimensions for heavy-duty vehicles such as lorries and buses. The latest proposals will normalise cross-border traffic of very long and heavy vehicles between Member States that authorise them.

ETSC has serious concerns about the impact of Longer and Heavier Vehicles on road safety. These vehicles have been allowed to circulate under strict conditions, as part of trials or special bilateral agreements, but all the impacts of wider adoption have not been fully assessed.

The Council is yet to publish its common position. Once the Council has reached its position and following the European Parliament elections in June 2024, negotiations can take place between the institutions to reach a final deal.

### **The 2024 ETSC PIN Award goes to...**

Finland is the winner of the 2024 ETSC Road Safety Performance Index (PIN) Award for outstanding progress in road safety.

### **Note on countries covered by the ETSC PIN programme**

This report includes aggregate data analysis covering the 32 countries that participate in ETSC's Road Safety Performance Index (PIN) programme. They are:

- The 27 EU Member States;
- the United Kingdom, a former EU Member State;
- Norway and Switzerland, two Member States of the European Free Trade Area;
- Israel, an associated state of the European Union;
- Serbia, a candidate EU Member State.

The 27 EU Member States agreed to, and will work towards, the aim of achieving the common target to halve the number of road deaths and serious injuries in the EU over the period 2020-2030. This target followed an earlier target set in 2010 to halve the number of road deaths by 2020.

## MAIN RECOMMENDATIONS TO NATIONAL GOVERNMENTS

---

- Adopt and implement the Safe System approach to road safety by addressing all elements of the road transport system in an integrated way, adopting shared overall responsibility and accountability between system designers and road users.
- Adopt road safety plans, including national targets for reducing road deaths and serious injuries alongside the quantitative sub-targets based on key performance indicators.
- Seek to accelerate progress by all available means, including applying proven traffic law enforcement strategies according to the EC Recommendation on Enforcement.
- Look for synergies between safety goals, including those in speed management, and goals for reducing emissions and energy use.
- Provide sufficient government funds to allow the target-oriented setting of measures and set up financing and incentive models for regional and local levels. Use the evidence gathered to devise and update relevant policies. Make the choice of measures based on sound evaluation studies and, where applicable, cost-effectiveness considerations in the impact assessment of countermeasures.
- Conduct a thorough qualitative assessment of current road safety strategies to evaluate the levels of implementation and effectiveness and contribute to the European Road Safety Observatory (ERSO) review.
- Fast-track data collection for the Key Performance Indicators included in the EU Road Safety Policy Framework 2021-2030.
- Prepare to implement network-wide road safety assessment and meet the deadline of 2024 set by the 2019 Road Infrastructure Safety Management Directive.
- Support cities in their efforts to introduce Sustainable Urban Mobility Plans (SUMPs), now mandated for urban nodes in the TEN-T network, and encourage inclusion of road safety measures and targets.

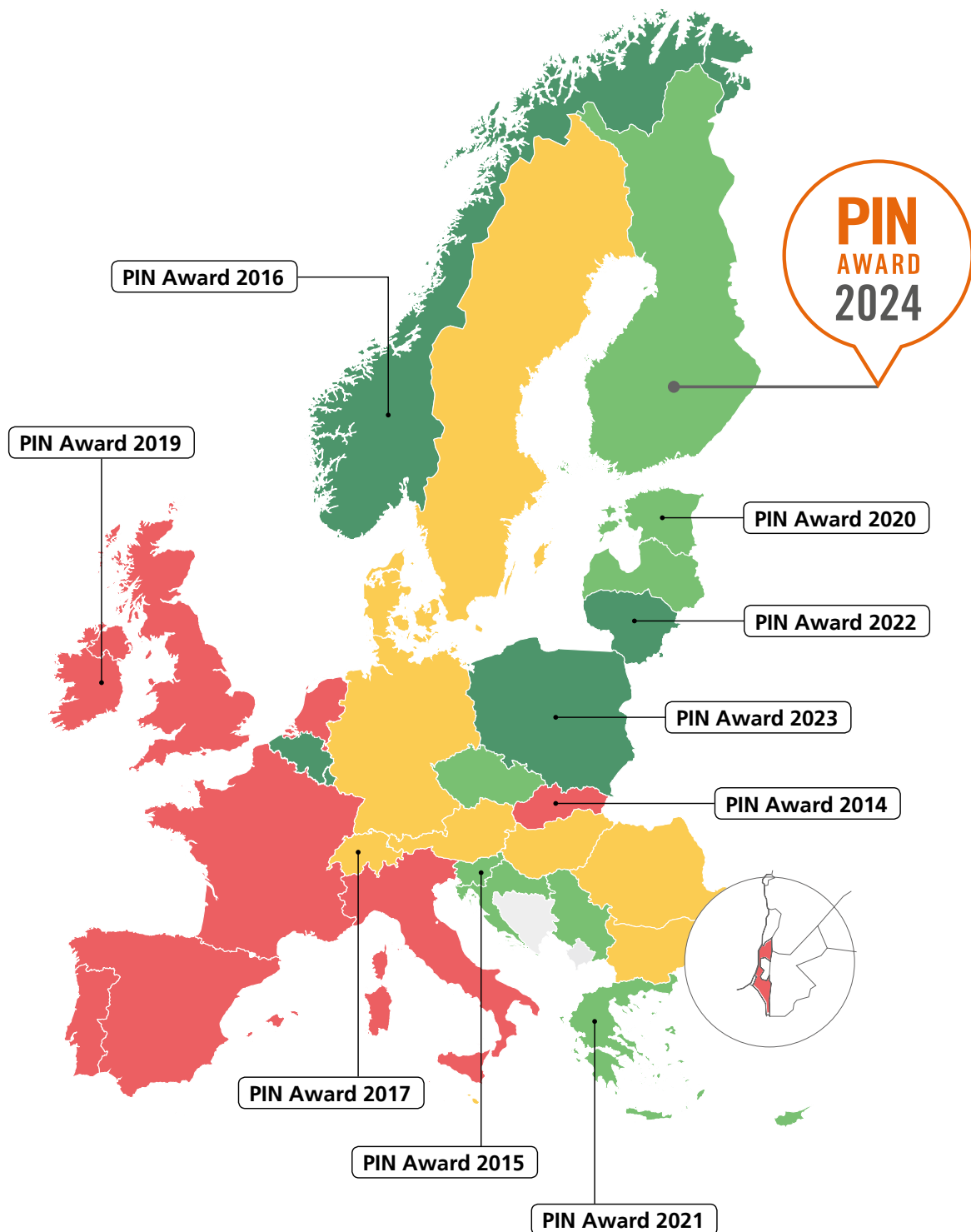
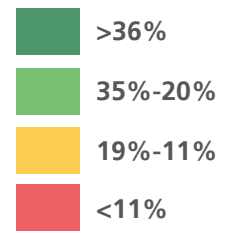
## MAIN RECOMMENDATIONS TO THE EU

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- Create a new EU agency to support safe, smart and sustainable road transport operations.
- Assess the level of ambition of Member State strategies and measures to see if they are sufficient to achieve EU road safety targets.
- Regarding the implementation of the EU Road Safety Policy Framework 2021-2030:
  - Redouble road safety action in light of the implementation report on the framework expected in 2025.
  - Continue to support Member States in collecting harmonised data for road safety Key Performance Indicators (KPIs) and serious injuries (MAIS3+).
- Encourage Member States, through a formal EC recommendation, to apply safe speed limits in line with the Safe System approach for different road types such as 30km/h on urban roads, 70km/h on undivided rural roads and a top speed of 120km/h or less on motorways, and implement best practices on enforcement.
- Create the position of “Road Safety Envoy”, reporting to the Commission President, as soon as the next Commission is appointed.

**MAP 1:**

Relative change in road deaths between 2013 and 2023 and recipient countries of the PIN Award over the period 2013-2023 (Fig.3, Table 2 in the annexes)





## PART I

---

# PROGRESS IN REDUCING ROAD DEATHS IN 2023, AND OVER THE PREVIOUS DECADE

# INDICATOR

The EU has set a target to halve the number of road deaths by 2030, based on their level in 2019. In this chapter, we track progress using, as the main indicators, the relative changes in the numbers of people killed on the road over three distinct time periods: the annual change from 2022 to 2023 (Figure 1), the change from a pre-Covid base year (2019) to 2023 (Figure 2) and the decade 2013 to 2023 (Figure 3 and Figure 4).

A person killed in traffic is someone who was recorded as dying immediately or within 30 days from injuries sustained in a collision on a public road. We also use road mortality expressed as the number of road deaths per million inhabitants - as an indicator of the current level of road safety in each country (Figure 6). Additionally, the risk expressed as the number of road deaths per billion motor vehicle km travelled is presented in countries where the data are available (Figure 7).

The data used are from national statistics supplied by the PIN panellist in each country. Data for Romania have been provided by the European Commission's CARE team. The numbers of road deaths in 2023 in Belgium, Germany, Denmark, Finland, Greece, Hungary, Italy, Spain, Ireland, Latvia, Portugal and Romania, are provisional as final numbers were not yet available at the time this report went to print. Annual numbers of deaths in Luxembourg and Malta are particularly small and are, therefore, subject to substantial annual fluctuation. Annual numbers of deaths in Cyprus and Estonia are also relatively small and may be subject to considerable annual fluctuation. The UK data for 2023 are the provisional total for Great Britain for the year 2023 together with Northern Ireland's total for the calendar year 2023.

The full dataset is available in the annexes. Population data were retrieved from the EUROSTAT database.

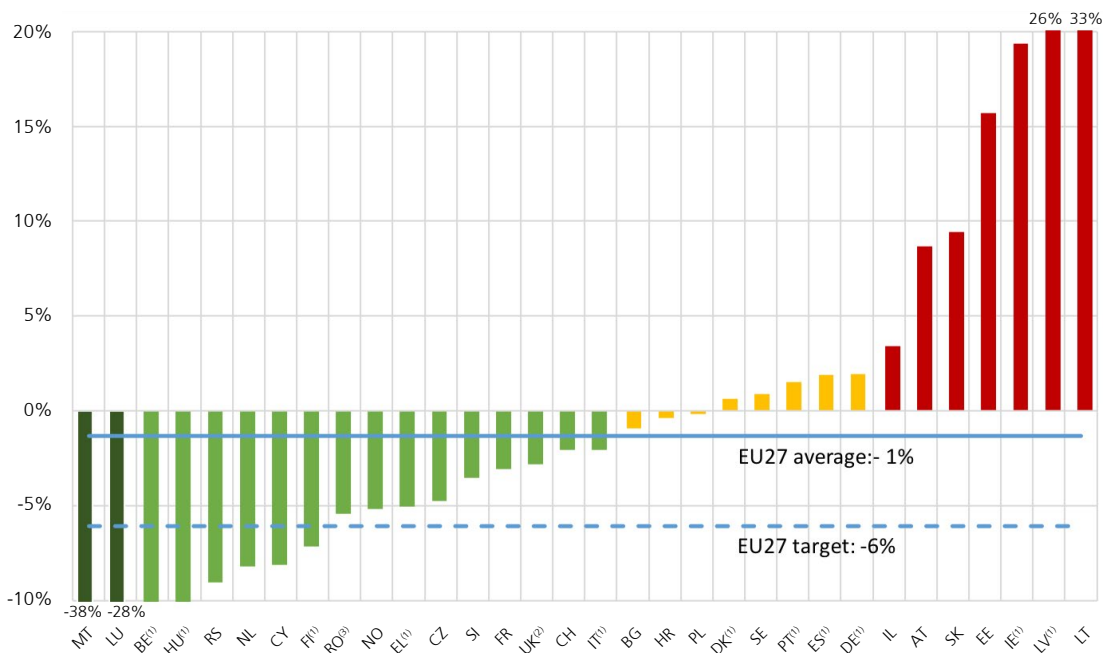
# 01

## 1.1 A 1% DECREASE IN ROAD DEATHS IN THE EU BETWEEN 2022 AND 2023

In 2023, 18 of the 32 countries monitored saw a decline in road deaths compared to 2022, as illustrated in Figure 1. Malta led with a 38% reduction, followed by Luxembourg at 28%, Belgium at 11% and Hungary at 10%. Conversely, road deaths stagnated in two countries and increased in 12 countries, with Lithuania experiencing a significant increase of 33%, and Latvia's deaths increasing by 26%. Collectively, the EU27 reported a marginal decrease of 1% in road deaths for the year. However, to meet the EU's ambitious target for 2030, an average annual reduction of 6.1% is required from the baseline year of 2019.

**Figure 1. Relative change in road deaths between 2022 and 2023.**

<sup>(1)</sup>National provisional estimates used for 2023, as final numbers for 2023 were not available at the time this report went to print.  
<sup>(2)</sup>UK data for 2023 are the provisional total for Great Britain (1645) combined with the total for Northern Ireland (71) for the calendar year 2023.  
<sup>(3)</sup>CARE provisional data. The annual number of deaths in LU and MT are particularly small and, therefore, subject to substantial annual fluctuations. Annual numbers of deaths in CY and EE are relatively small and, therefore, may be subject to relatively strong annual fluctuations.



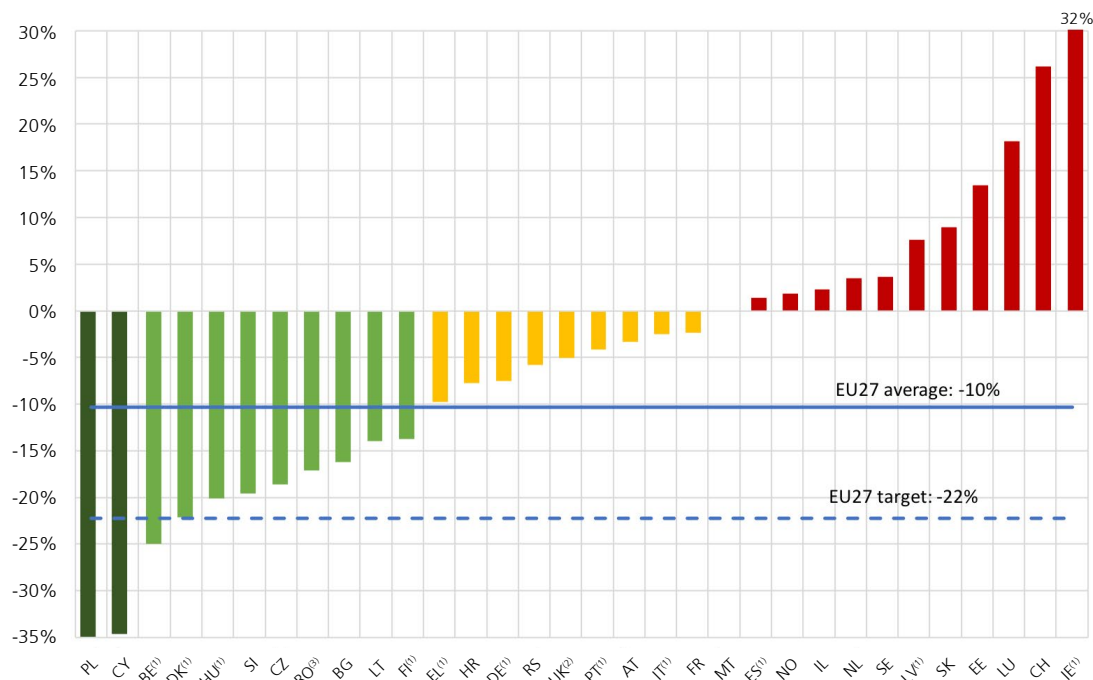
## 1.2 A 10% REDUCTION IN ROAD DEATHS IN THE EU SINCE 2019

In the PIN programme’s analysis of 32 countries, 20 showed a reduction in road deaths in 2023 compared to 2019, as illustrated in Figure 2. Poland and Cyprus lead the ranking with a significant decrease of 35%. Belgium and Denmark follow with reductions of 25% and 22%, respectively. Road deaths in Malta remained stable with a 0% change. Conversely,

an increase in road deaths was observed in 11 countries within the same period. Notably, Ireland saw a surge of 32%, while Switzerland saw an increase of 26%. Collectively, the EU27 achieved a decrease of road deaths of 10% in 2023 relative to 2019 figures. However, to align with the EU’s target for a safer road environment by the year 2030, a reduction of at least 22.3% was necessary.

**Figure 2. Relative change in road deaths between 2019 and 2023.**

<sup>(1)</sup>National provisional estimates used for 2023, as final figures for 2023 were not available at the time this report went to print.  
<sup>(2)</sup>UK data for 2023 are the provisional total for Great Britain (1645) combined with the total for Northern Ireland (71) for the calendar year 2023.  
<sup>(3)</sup>CARE provisional data. The annual number of deaths in LU and MT are particularly small and, therefore, subject to substantial annual fluctuations. Annual numbers of deaths in CY and EE are relatively small and, therefore, may be subject to relatively strong annual fluctuations.



### 1.3 NO EU COUNTRY HALVED THE NUMBER OF DEATHS OVER THE LAST DECADE

Over the last decade, no EU Member State achieved a reduction in road deaths exceeding 50%. Poland stands out with the highest reduction, achieving a remarkable 44% decrease in road deaths (see Figure 3). Additionally, 16 other PIN countries (Luxembourg, Norway,

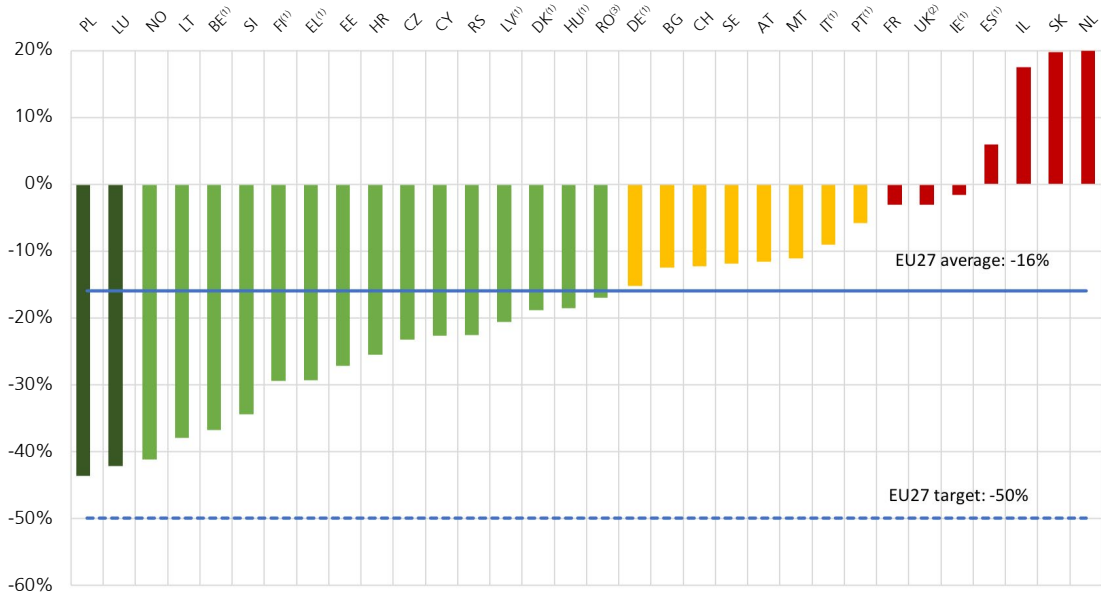
Lithuania, Belgium, Slovenia, Finland, Greece, Estonia, Croatia, Czechia, Cyprus, Serbia, Latvia, Denmark, Hungary and Romania) surpassed the EU average by achieving reductions above 16%. However, some countries made less progress. Notably, four countries experienced an increase in road deaths during this period: the Netherlands and Slovakia saw a 20% rise, Israel experienced a 17% increase, and Spain reported a 6% increase.

**Figure 3. Relative change in road deaths between 2013 and 2023.**

<sup>(1)</sup>National provisional estimates used for 2023, as final figures for 2023 were not yet available at the time this report went to print.

<sup>(2)</sup> UK data for 2023 are the provisional total for Great Britain (1645) combined with the total for Northern Ireland (71) for the calendar year 2023.

<sup>(3)</sup>CARE provisional data. The annual number of deaths in LU and MT are particularly small and, therefore, subject to substantial annual fluctuations. Annual numbers of deaths in CY and EE are relatively small and, therefore, may be subject to relatively strong annual fluctuations.



The 2024 ETSC Road Safety Award was presented to Finland on 19 June 2024. The award recognises Finland long-term performance in improving road safety. The background to the country's recent progress is detailed in an interview with Ms Lulu Ranne, Minister of Transport and Communications in Part IV.





## BELGIUM FOCUS ON ENFORCEMENT AND PROTECTING VULNERABLE ROAD USERS

Road deaths in Belgium decreased by 37% between 2013 and 2023. Between 2019 and 2023, the decrease was 25%.

Belgium has implemented several new road safety measures in recent years, with a focus on improving the safety of vulnerable road users and strengthening enforcement. Some of the country's large cities extended the zones where speed is limited to 30km/h, some to the entire city, such as Brussels. The network of separated cycle paths has also been extended. The enforcement chain has been improved. The treatment of fines is now largely standardised and additional resources have been allocated to ensure that all fines are being treated. The deployment of safety cameras, including section control cameras, has increased. 5000 Automatic Number Plate Recognition cameras that can automatically read vehicle number plates are now in use in Belgium. One in three Belgians received a ticket for speeding in 2023. Penalties, such as driving bans for handheld mobile phone use and combined recidivism (e.g. speeding and alcohol), contribute to effective enforcement. Regular campaigns, like the BOB drink-driving campaign, raise awareness and encourage responsible behaviour. During the BOB campaign, most police forces in Belgium conduct alcohol controls, reinforcing the vital link between awareness and enforcement.



## THE NETHERLANDS ROAD DEATHS HAVE STAGNATED SINCE 2010

Road deaths in the Netherlands have stagnated since 2010. Over the last year, there was a decrease from 754 in 2022 to 684 in 2023. However, between 2019 and 2023, road deaths went up by 3% and, over the decade 2013 to 2023 increased by 20%.

In 2023, for the fourth consecutive year, **cyclists** accounted for more deaths in the Netherlands (270 deaths, representing 39% of all road deaths) than **car occupants** (194 deaths, comprising 28% of all road deaths).

In 2023, 375 (55%) of all road deaths were people over the age of 60. The number of road deaths in this age group has been increasing for a number of years although this could be due to the population ageing and the fact that older people now form a larger share of the population.

The Dutch Strategic Plan for Road Safety 2030 has identified areas for improvement, and safety performance indicators are in place to address behavioural issues such as drink-driving, distraction, and use of protective equipment (seatbelts, child restraint systems, helmets). Additionally, road authorities now have access to more data, enabling them to identify high-risk road sections and crossings.

In a 2022 report, SWOV, the Dutch road safety research institute, recommended several measures, including:

- reducing speed limits in cities to 30km/h on unsafe 50km/h roads;
- improving cyclist safety by making cycling infrastructure 'forgiving';
- doubling the level of speed enforcement;
- re-introducing the alcohol interlock programme, combined with increased enforcement of drink-driving to boost the chance of being caught;
- introducing a progressive fine system.<sup>1</sup>

<sup>1</sup> SWOV (2022) A 50% reduction in road casualties by 2030? Calculating the effect of additional measures (in Dutch with English summary), <https://tinyurl.com/mwk7fh84>



## **SLOVENIA** **IMPORTANT INITIATIVES** **CONTRIBUTED TO A DECREASE IN** **ROAD DEATHS**

Between 2013 and 2023, road deaths in Slovenia decreased by 34%, and since 2019, there has been a 20% reduction.

Several initiatives have contributed to this positive trend. Notably, important infrastructure projects, such as the completion of a motorway connecting Slovenia with the rest of Europe, have enhanced road safety. Additionally, the construction of long-distance cycle paths aims to better protect vulnerable road users.

In terms of driver education, young and novice drivers (categories A and B) in Slovenia now follow an additional defensive driver training programme. Furthermore, young people up to the age of 18 are required to wear helmets when cycling or riding e-scooters. The emergency services have also improved their response times, partly due to awareness campaigns emphasising the importance of creating an emergency corridor during traffic jams. National campaigns specifically target seatbelt and helmet usage.



## **NORWAY** **WORK ON ROAD TRAFFIC SAFETY** **NEEDS TO BE STEPPED UP**

Between 2019 and 2023, road deaths in Norway increased by 5%. Excluding the two pandemic years (2020 and 2021), the average annual number of road deaths in Norway between 2019 and 2023 was 111. Road deaths in Norway have plateaued.

2023 saw an increase in the number of children and young road users killed. In 2022 and 2023 there was also an increase in the number of fatal collisions involving multiple deaths. In 2023 almost half of those killed in these collisions were between 15 and 20 years old. In the six months from April to September last year, a third of all deaths were motorcyclists.

In March 2024, the Norwegian Government presented an ambitious new National Transport Plan for the period 2025-2036. This plan includes an interim target for 2030 of no more than 350 people killed or seriously injured (maximum

of 50 killed). These are the same targets as in the previous Transport Plan (2022-2033). The Transport Plan will be debated and voted in Parliament before the summer of 2024.

If Norway is to reach its target, there is broad agreement among all stakeholders that work on road traffic safety must be stepped up. The path towards the interim targets is still a long way off.



## **DENMARK** **REDUCED SPEEDS, FEWER ALCOHOL-** **RELATED DEATHS AND INCREASED** **BICYCLE HELMET-WEARING RATES**

In Denmark, road deaths decreased by 22% between 2019 and 2023 and by 19% between 2013 and 2023.

A number of important factors could have contributed to the reduction. Average speeds on rural roads in Denmark have reduced in recent years. In 2016, for instance, 45% of vehicles travelling on 80km/h rural roads were within the speed limit, whereas this had increased to 53% by 2022.

The number of people killed in alcohol-related collisions in Denmark decreased from 41 in 2013 to 29 in 2022.

Denmark has high rates of cycling and so an increase in the use of bicycle helmets, particularly among cycling school children will also have had an impact on road safety. In 2022, on average, half of all Danish cyclists wore a cycle helmet.

Denmark continues to prioritise traffic safety education for primary and lower secondary school students and delivers frequent road safety campaigns on topics such as speeding, distraction, orientation, bicycle helmet wearing, safety for elderly cyclists and young drivers.



## **SWITZERLAND**

*“The numbers of road deaths and serious injuries in Switzerland in 2023 are not encouraging. We interpret them as an alarm signal and a clear mandate to all stakeholders to significantly intensify traffic safety efforts”.*

Markus Deublein, Dr. sc. ETHZ, Swiss Council for Accident Prevention.

## 1.4 ROAD DEATHS DECREASED BY 16% BETWEEN 2013 AND 2023, FASTER THAN SERIOUS INJURIES

In 2023, there were 20,418 deaths on EU roads. Over the period from 2013 to 2023, the EU27 achieved a collective 16% reduction in road deaths (as shown in Figure 4). In the last decade, there were 20,981 fewer deaths than if the death rate had remained at the 2013 level (as depicted in Figure 5).

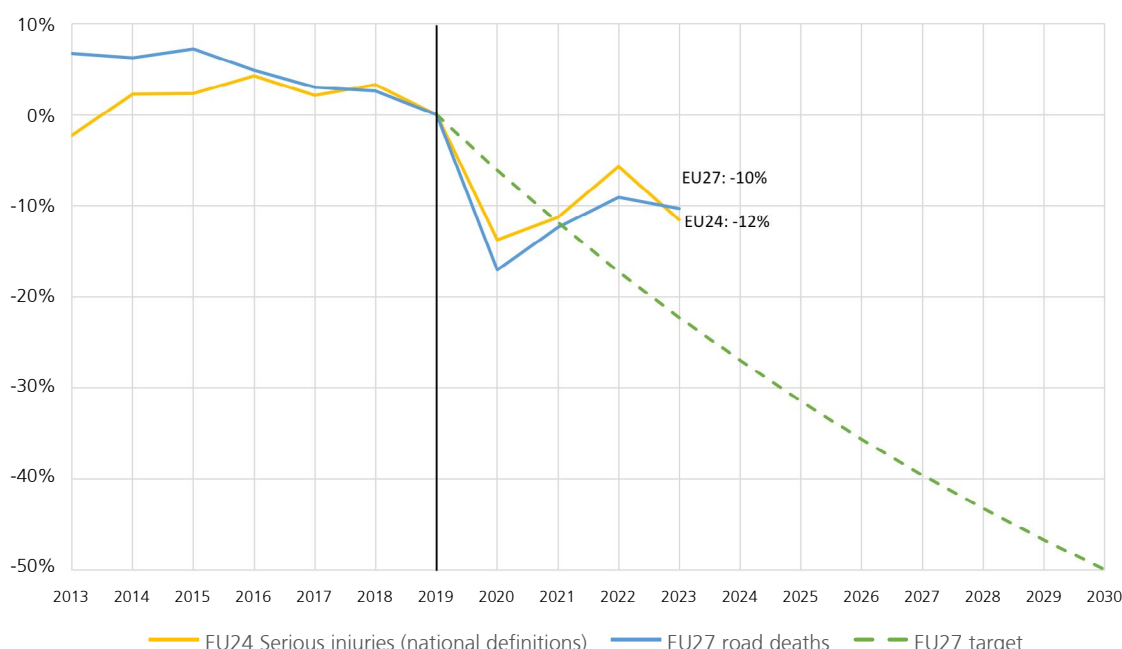
Over a six-year period, the reduction in road deaths on EU roads remained stagnant, with only a 6% decrease from 2014 to 2019. However, in 2020, there was a remarkable drop of 17% compared to the previous year. This decline was largely attributed to Covid-19 travel restrictions across Europe. In 2021, despite a consistent 13% reduction relative to 2019, the number of road deaths increased by 6% compared to 2020 due to the gradual easing of restrictions. Similarly, in 2022, there was a 9% reduction from the pre-pandemic year (2019), but road deaths rose by 4% compared to 2021, indicating a return to business as usual post-Covid-19. Unfortunately, in 2023, road deaths only decreased by 1%

compared to 2022, falling far short of the desired 6.1% annual progress needed to achieve the ambitious 2030 goal of a 50% reduction.

The progress in reducing serious road traffic injuries over the last decade in the EU24<sup>2</sup> collectively was poor, especially in comparison with the reduction in road deaths. There has only been a 10% reduction over the period 2013-2023 (Fig.4). The number of serious injuries remained almost unchanged until 2019. As with road deaths, there was a substantial drop of 14% in 2020 compared to 2019, most likely due to the various measures imposed during the Covid-19 pandemic. The number of serious injuries increased by 3% in 2021 compared to 2020 and increased again by 6% in 2022 compared to 2021. 2023 saw a decrease of 7% in serious injuries compared to 2022.

The exceptional 2020 and 2021 results were largely a consequence of Covid-19 lockdowns and associated measures. As we can observe in 2022 and 2023, there is no guarantee that this progress can be maintained under a return to business-as-usual.

**Figure 4. Change in the number of road deaths in the EU27 since 2013 compared with the EU target for 2030 and change in the number of serious road traffic injuries in the EU24 based on countries' national definitions.**  
EU24: EU27 excluding RO due to lack of updated data and LT and IE due to inconsistent trend data. EU27 level of road deaths in 2023 and EU24 level of serious road traffic injuries in 2023 are an ETSC estimate as road deaths and serious injury data for 2023 were not available for some countries at the time this report went to print.



<sup>2</sup> EU24: EU27 excluding RO due to lack of updated data and LT and IE due to inconsistent trend data.

## 1.5 SOME 20,900 LIVES SAVED SINCE 2013 IS OF CONSIDERABLE VALUE

Between 2014 and 2023, the EU successfully prevented 20,981 road deaths compared to the projected number if each Member State had maintained the same death rate as in 2013. However, it's important to note that an additional 52,754 lives could have been saved if the annual reduction of 6.7% required to achieve the 50% reduction target within a decade had been consistently reached (as depicted in Figure 5, left column).

Putting monetary value on prevention of loss of human life can be debated on ethical grounds. However, doing so makes it possible to assess objectively the costs and benefits of road safety measures and helps to make the most effective use of generally limited resources.

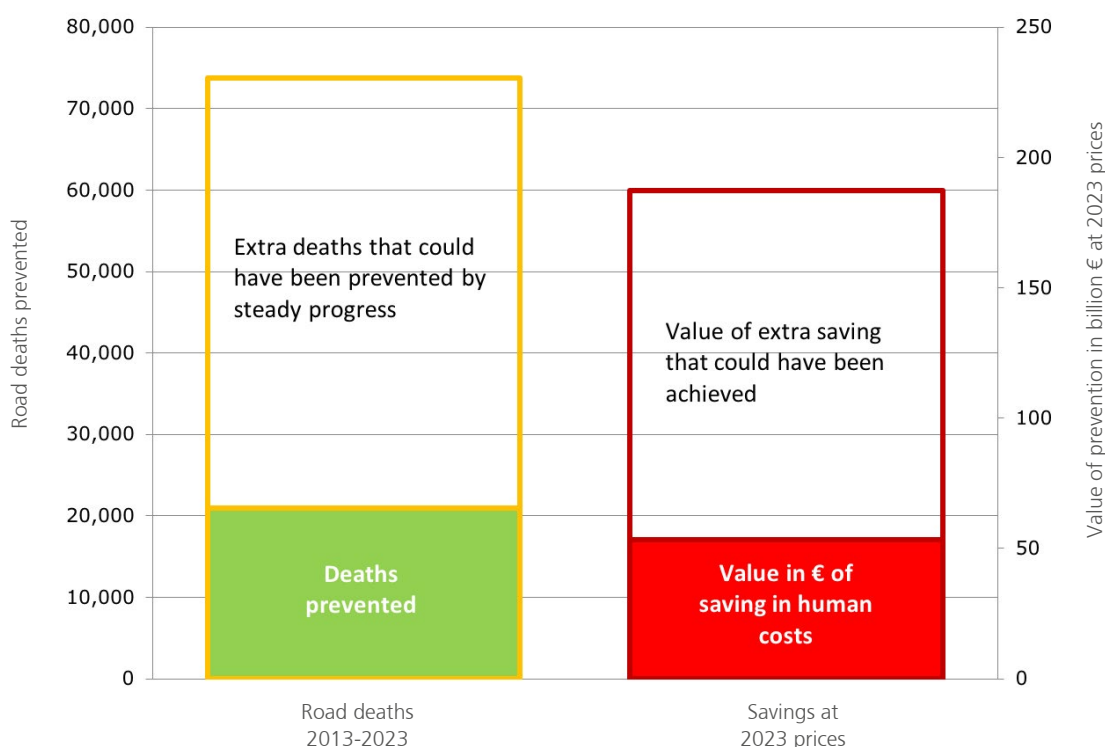
The Value of Preventing one road Fatality (VPF), estimated for 2016 in the EU Handbook on the external costs of transport (2019),<sup>3</sup> has been

updated in this PIN report to take account of changes to the economic situation in the intervening years.<sup>4</sup> As a result, we have taken the monetary value for 2023 of the human losses avoided by preventing one road death to be €2.5 million at market prices in 2023.<sup>5</sup>

The total value of the human losses avoided by reductions in road deaths in the EU27 for 2023 compared to 2013 is estimated at approximately €10 billion, and the value of human losses avoided by the reductions in road deaths in the years 2014-2023 taken together compared with 2013 is about €53 billion (Fig.5, right column).

If EU road deaths had reduced at a constant annual rate of progress of 6.7%, the greater reductions in deaths in the years 2014-2023 would have increased the valuation of the benefit to society by about €134 billion to about €187 billion over those years (Fig.5, right column).

**Figure 5.** Reduction in the number of road deaths in EU27 over the period 2013-2023 and valuation at 2023 prices and value, together with the additional savings – both in deaths prevented and costs of this number of deaths – that could have been achieved if the EU had a steady annual reduction of 6.7%.



<sup>3</sup> European Commission (2019), Handbook on the external costs of transport, <https://data.europa.eu/doi/10.2832/51388>

<sup>4</sup> Please note that the values used have not been updated in the light of the VALOR study, <https://tinyurl.com/yskp3f5e>

<sup>5</sup> For more information, see ETSC (2020), Updated methodological note to the 14<sup>th</sup> Road Safety Performance Index (PIN) Report.

## 1.6 NORWAY - THE SAFEST COUNTRY FOR ROAD USERS

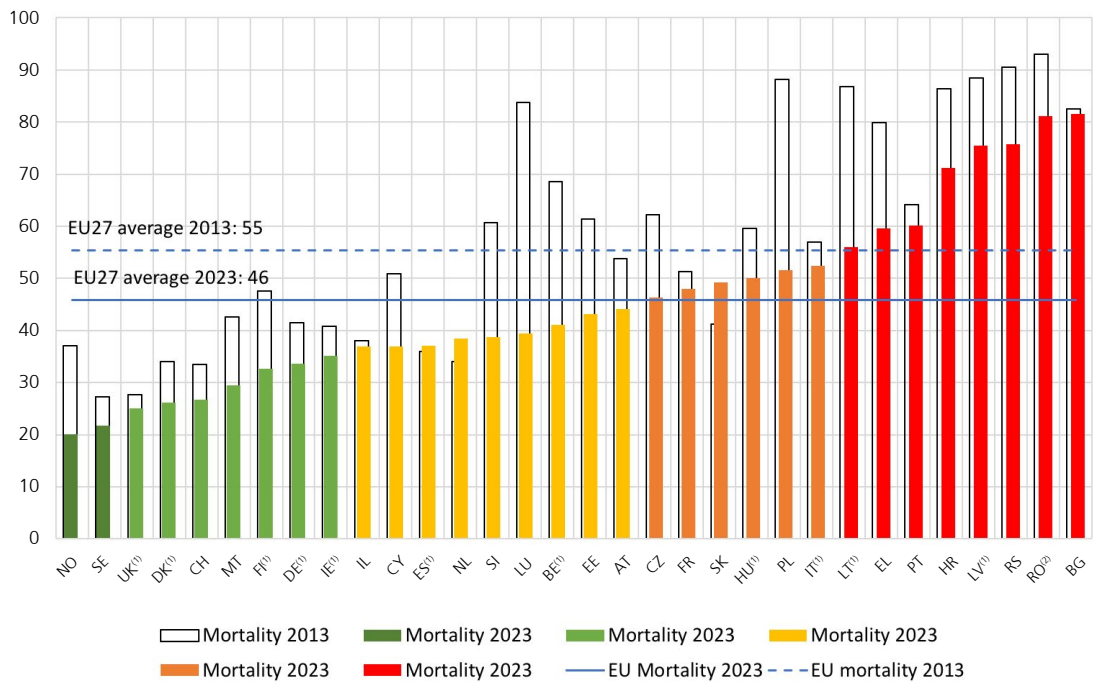
In 2023 in the EU27, average road mortality was 46 deaths per million inhabitants compared to 55 per million in 2013 (as shown in Figure 6).

Mortality in the PIN countries differs by a factor of almost four between the groups of countries with the highest and the lowest mortality.

In 2023 Norway was the leader among the PIN countries with 20 road deaths per million

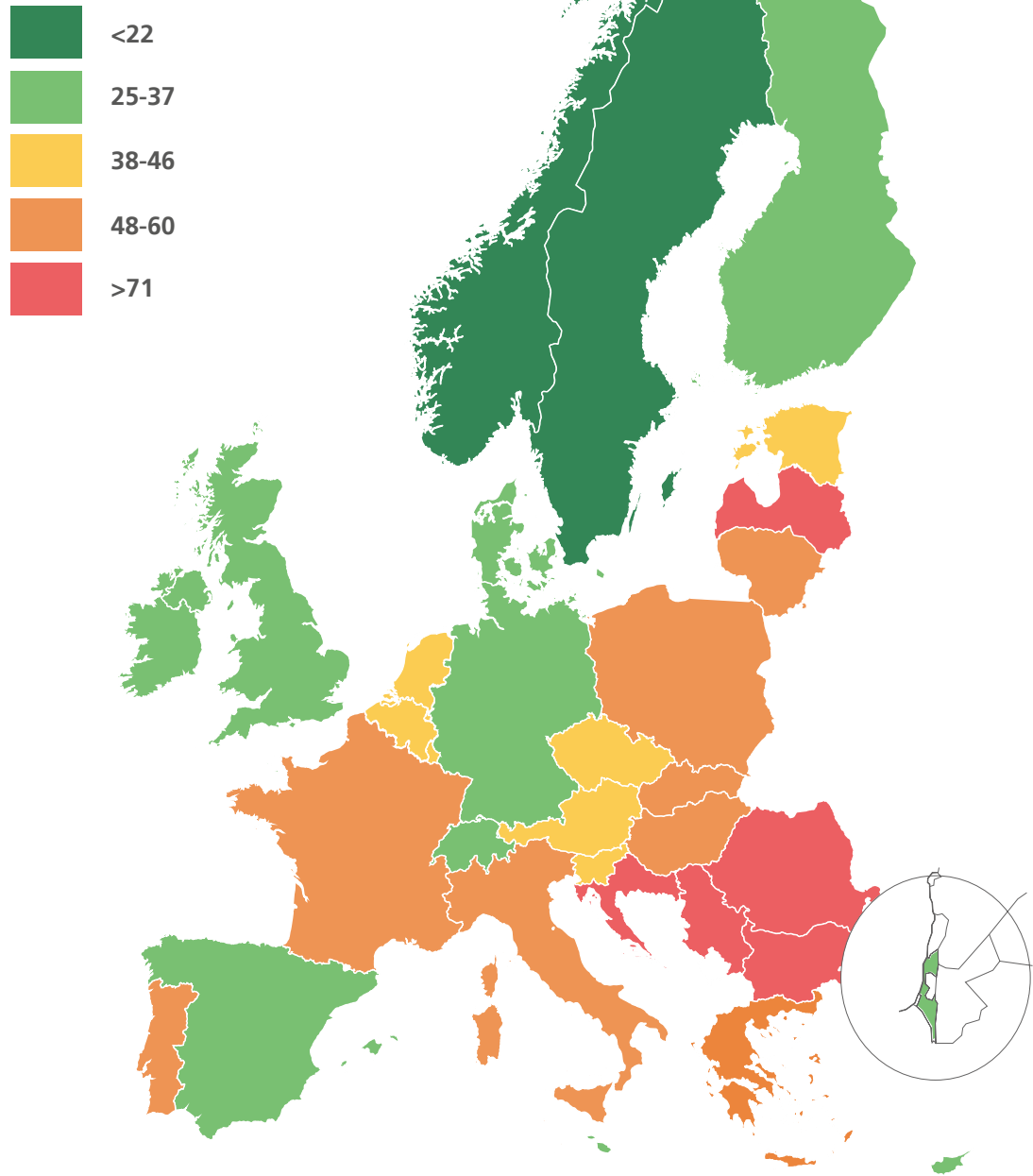
inhabitants. Sweden follows with 22 deaths per million. In the UK, Denmark, Switzerland, Malta, Finland, Germany and Ireland, road mortality is below or equal to 35 deaths per million. The highest mortality is in Bulgaria and Romania with 82 and 81 road deaths per million inhabitants respectively. In three countries – Spain, Slovakia and the Netherlands – road mortality is higher in 2023 than it was in 2013.

**Figure 6. Mortality (road deaths per million inhabitants) in 2023 (with mortality in 2013 for comparison).**  
<sup>(1)</sup>National provisional estimates used for 2023, as final figures were not available at the time this report went to print.  
<sup>(2)</sup>CARE provisional data



**MAP 2:**

Road deaths per million inhabitants in 2023  
(Fig.6, Table 3 in the annexes)



## 1.7 ROAD DEATHS PER VEHICLE-DISTANCE TRAVELLED

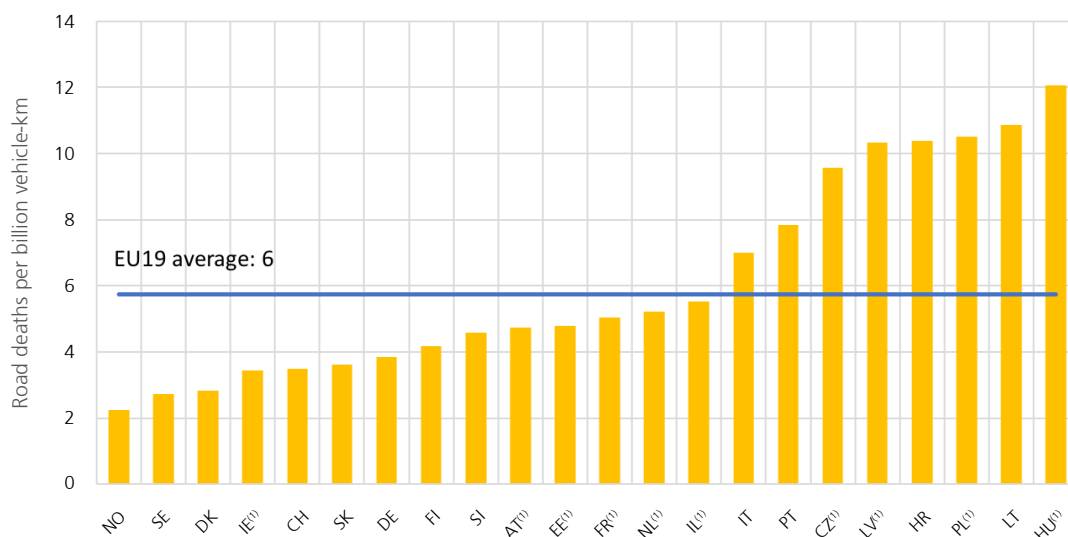
Figure 7 shows road deaths per billion motor vehicle-km travelled for the 23 PIN countries where up-to-date data are available. This indicator complements the well-established indicator of road mortality (Figure 6).

Measured in this way, Norway, Sweden, Denmark, Ireland and Switzerland have the lowest road risk among the countries collecting up-to-date countrywide data. The road risk in the PIN

countries differs by a factor of four between the groups of countries with the highest and the lowest number of road deaths per vehicle-distance travelled.

Differences between the relative positions of countries in Figure 6 and Figure 7 can arise from differences in aspects such as levels of motorcycling, cycling or walking, traffic volume, proportions of traffic on motorways and rural roads, different methods for estimating the distance travelled or other factors.

**Figure 7. Road deaths per billion vehicle-km 2021-2023 average. Average for the latest three years for which both the road deaths and the estimated data on distance travelled are available.**  
<sup>(1)</sup>2020-2022. EU19 average: EU27 excluding BE, BG, CY, EL, ES, LU, MT, and RO due to lack of data on vehicle distance travelled. Note: single cyclist deaths are included in the road death data used in this figure.



## RECOMMENDATIONS TO NATIONAL GOVERNMENTS

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- Adopt and implement the Safe System approach to road safety by addressing all elements of the road transport system in an integrated way and adopting shared overall responsibility and accountability between system designers and road users.<sup>6 7</sup>
- Adopt Road Safety Plans, including national targets for reducing serious injuries (based on the MAIS3+ standard) alongside a reduction of road deaths and quantitative sub-targets based on performance indicators.
- Seek to accelerate progress by all available means, including applying proven traffic law enforcement strategies according to the EC Recommendation on Enforcement.<sup>8</sup>
- Provide sufficient government funds to allow the target-oriented setting of measures and set up financing and incentive models for the regional and local levels. Use the evidence gathered to devise and update relevant policies. Make the choice of measures based on sound evaluation studies and, where applicable, cost-effectiveness considerations, in the impact assessment of countermeasures.
- Conduct a thorough qualitative assessment of current road safety strategies to evaluate the levels of implementation and effectiveness of the road safety measures in reaching road safety targets.

## RECOMMENDATIONS TO THE EU

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- Create a new EU agency to support safe, smart and sustainable road transport operations.<sup>9</sup>
- With regard to the EU Road Safety Policy Framework 2021-2030,<sup>10</sup> redouble road safety action in light of the implementation report on the framework expected in 2025.

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<sup>6</sup> OECD-ITF (2016), Zero Road Deaths and Serious Injuries, Leading a Paradigm Shift to a Safe System approach, <https://bit.ly/42ugtZQ>

<sup>7</sup> OECD-ITF (2022), The Safe System Approach in Action, <https://bit.ly/3V6kzxA>

<sup>8</sup> EC Recommendation on Enforcement in the Field of Road Safety 2004/345, <https://bit.ly/39aWdh3>

<sup>9</sup> ETSC (2018) Briefing: 5<sup>th</sup> EU Road Safety Action Programme 2020-2030, <https://bit.ly/2LuTDBW>

<sup>10</sup> ETSC (2019) Briefing: EU Strategic Action Plan on Road Safety, <https://bit.ly/3iiD3YR>



## **PART II**

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# **SERIOUS INJURIES: LITTLE PROGRESS SINCE 2013**



## MAIS3+ DEFINITION

The Abbreviated Injury Scale (AIS) is a globally accepted trauma classification of injuries, which ranges from 1 (minor injuries) to 6 (non-treatable injuries) and is used by medical professionals to describe the severity of injury for each of the nine regions of the body (Head, Face, Neck, Thorax, Abdomen, Spine, Upper Extremity, Lower Extremity, External and other). As one person can have more than one injury, the Maximum Abbreviated Injury Score (MAIS) is the maximum AIS of all injury diagnoses for a person.

The High Level Group on Road Safety representing all EU Member States identified three main ways Member States can choose to collect data in accordance with the MAIS3+ definition:

1. continue to use police data but apply a correction coefficient based on samples;
2. report the number of injured based on data from hospitals;
3. create a link between police and hospital data.

All methods used for estimating the number of serious traffic injuries (MAIS3+) are in one way or another based on hospital records. Even when applying correction to police data, it is necessary to have samples of hospital data to derive the correction factors.<sup>11</sup> These correction factors are likely to be different depending on the travel mode, age group and country.

ETSC recommends the third option but, as matching police and hospital data is not straightforward, Member States that have not yet started this process should make use of option 2 or, if that is not possible nationwide, option 1. Within the framework of the SafetyCube project financed by the European Commission, a study was published on serious road traffic injury data reporting practices. It provides guidelines and recommendations for each of the three main ways to estimate the number of serious road traffic injuries in order to assist Member States in MAIS3+ data collection.<sup>12</sup>

As part of a project in 2022, the Association for the Advancement of Automotive Medicine (AAAM) provided the European Commission with a number of tools to assist those collecting data according to the MAIS3+ definition.<sup>13</sup>

<sup>11</sup> SafetyCube (2016), Practical guidelines for the registration and monitoring of serious traffic injuries, Deliverable 7.1, <https://goo.gl/hWHPCG>

<sup>12</sup> Ibid

<sup>13</sup> <https://tinyurl.com/bd23dcn9>

## 2.1 THE FIRST EU TARGET TO HALVE SERIOUS INJURIES BETWEEN 2020 AND 2030

In 2018, the European Commission announced the first target for reducing serious road traffic injuries by 50% between 2020 and 2030. The announcement followed EU transport ministers' adoption of the Valletta Declaration on road safety in 2017, including a call for such a target.

In 2020, the European Commission updated the estimated number of serious road traffic injuries. According to this estimate, 110,000 people were seriously injured on EU27 roads in 2019 based on the common EU definition of what constitutes a serious road injury – an in-patient with an injury level of MAIS3 or more (see box).<sup>14</sup>

## 2.2 MOST COUNTRIES REDUCED THE ANNUAL NUMBER OF SERIOUS INJURIES SINCE 2013

In addition to MAIS3+ data, Member States should also continue collecting data based on their previous national definitions. This will enable monitoring of progress in the same way at least until these rates of progress can be compared with those under the new definition.

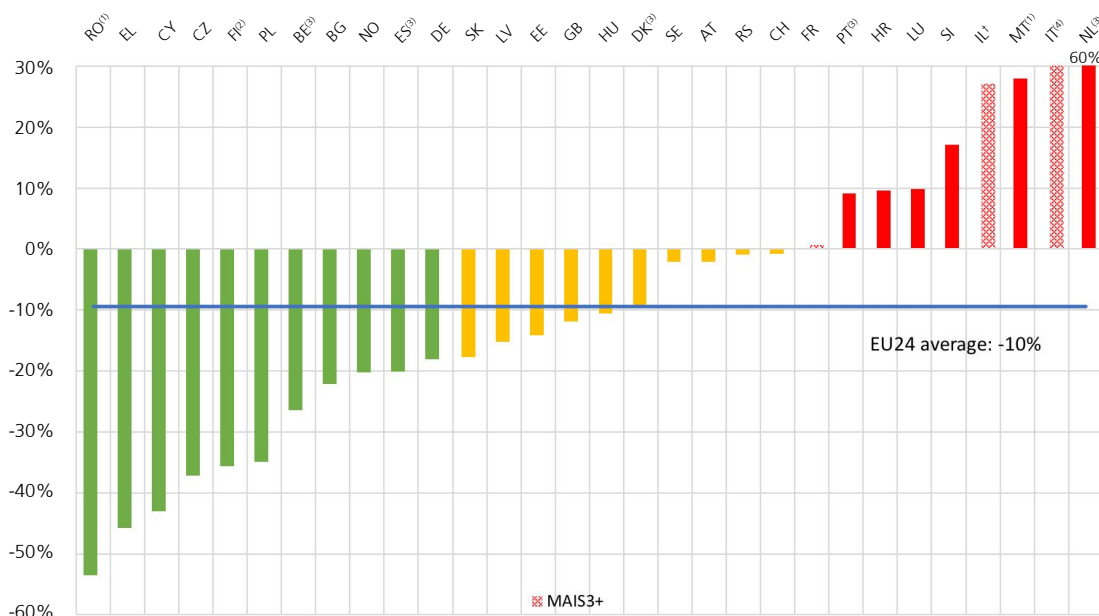
Figure 8 shows the relative change in the number of serious injuries over the period 2013-2023 using current national definitions of a serious injury.

The number of people recorded as seriously injured, based on national definitions, decreased in 21 of 30 PIN countries that collect data. In the EU24 collectively, serious road traffic injuries reduced by 10% over the period 2013-2023 (Figure 8). Numbers of serious road traffic injuries in the EU as a whole stagnated during most of the decade, and then suddenly dropped in 2020 during the Covid-19 lockdowns. The number of recorded serious injuries went down by 54% in Romania for the period 2013-2021, by 46% in Greece over the period 2013-2023 and by 43% in Cyprus for the period 2013-2023. The number of recorded serious injuries increased by 60% in the Netherlands for the period 2013-2022, 31% in Italy for the period 2013-2022 and 28% in Malta for the period 2013-2021. The increase in Italy could also be the effect of the improved quality of hospital data in identifying people injured in a road collision.

<sup>14</sup> European Commission (2020), Road Safety: Europe's roads are getting safer but progress remains too slow, <https://bit.ly/3RgySx6>

**Figure 8. Relative change in recorded seriously injured (national definitions) over the period between 2013 and 2023 for countries where data are available.**

The years covered vary: <sup>(1)</sup>2013-2021, <sup>(2)</sup>2014-2022, <sup>(3)</sup>2013-2022, <sup>(4)</sup>2013-2022, MAIS3+. EU24: EU27 excluding LT, and IE due to inconsistent trend data and RO due to lack of updated data. PIN countries using a definition of seriously injured similar to having injuries requiring at least one night in a hospital as an in-patient: BE, CY, DE, EE, ES, FR, EL, IE, LV, LU, PT, UK, CH, IL.



## INDICATOR FIG. 8, 9 AND 10

It is not possible to compare the number of serious injuries between EU Member States because of the different national definitions of a serious injury, together with differing levels of underreporting. It is also too early to use data based on MAIS3+ for comparing countries over time. The comparison therefore takes as a starting point the changes in the numbers of seriously injured (based on each national definition) since 2013 (Figure 8). The changes in these numbers since 2013 are compared to the corresponding changes in the numbers of deaths since 2013 (Figure 10). Figure 9 shows the number of seriously injured road users based on national and MAIS3+ definitions per single road death recorded by the police in PIN countries where data are available.

The numbers of serious injuries were supplied by the PIN panellist in each country. The full dataset, together with the national definitions, are available in the annexes. All PIN countries collect data on “serious” injuries. The numbers of people seriously injured based on the national definition in 2023 are provisional in Bulgaria, Germany, Greece, Hungary, and Great Britain.

Fourteen countries (BE, CY, DE, EE, ES, FR, EL, IE, LV, LU, PT, UK, CH, IL) use similar definitions of severe injuries, spending at least one night in hospital as an in-patient or a close variant of this. In practice, however, in most European countries, there is unfortunately no standardised communication between police and hospitals and the categorisation as “serious” is often made by the police.

Within each country, a wide range of injuries are categorised by the police as serious under the applicable definition. They range from lifelong disablement with severe damage to the brain or other vital parts of the body to injuries whose treatment takes only a few days and have no longer-term consequences.

### 2.3 LARGE DIFFERENCES IN THE NUMBERS OF PEOPLE RECORDED AS INJURED DUE TO VARYING DATA COLLECTION METHODS AND REPORTING LEVELS

The exact number of people seriously injured in road collisions is not yet known in all EU countries.

Sample studies have shown that the actual number based on the national serious injury definition is often considerably higher than the number officially recorded by the police. In general, the lower the injury severity, the higher the underreporting in collision statistics collected by the police tends to be. The level of underreporting tends also to be higher for pedestrians, cyclists and motorcyclists than for vehicle occupants. This is especially the case when no motor vehicle is involved in a collision.

However, serious injury numbers based on the MAIS3+ definition tend to be smaller than those registered by the police as illustrated by data from countries where two data sets, MAIS3+ and police data, are collected (Figure 9). Therefore, serious injury numbers depend on definitions, data collection methodologies and data quality.

Figure 9 shows the number of seriously injured road users based on national and MAIS3+ definitions compared to the number of road deaths recorded by the police in PIN countries where data are available. Data based on national definitions are collected by the police while MAIS3+ data in one way or another are collected based on hospital records (see box MAIS3+ definition).

The reporting level of serious injuries recorded by the police based on national definitions varies greatly among countries. This can be related to differences in legislation, insurance policy, police resources and the quality of data collection and processing. In some countries, reporting is better because the police have to attend all collisions with personal injury (e.g. Germany) or because insurance compensation can only be claimed if there is a report by the police.

In the SafetyNet report “Estimating the real number of road accident casualties”, conversion

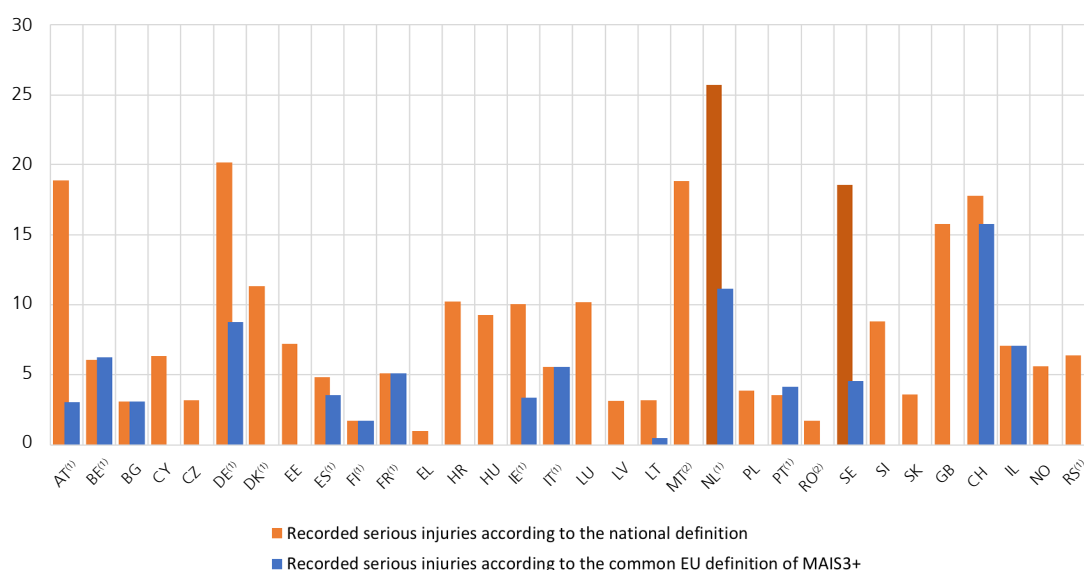
factors for underreporting in police records were estimated for eight EU countries.<sup>15</sup> It was originally envisaged that the conversion factors would be generalised to other EU countries to allow for European comparison. The authors came to the conclusion, however, that conversion factors differed too widely among countries and that comparable studies should be conducted in as many countries as possible.

When looking at recorded serious injuries based on national definitions, fewer than one serious injury is registered for every recorded road death in Greece, the ratio is around 26 in the Netherlands, 21 in Germany and 19 in Austria and Malta (Fig.9). The differences in seriously injured per death do not mean that fewer people are injured for every road death in Greece than in the Netherlands, Germany, Austria or Malta but rather that seriously injured survivors are better reported by the police in the latter countries. Disparities may also stem from differences in travel behaviour: the ratio of injured per death strongly depends on the travel mode, age and road type. Thus, neither serious injury numbers, nor ratios between killed and injured, are comparable between countries.

There are around 16 seriously injured people based on MAIS3+ definition for each road death in Switzerland, 11 in the Netherlands, and seven in Israel. There are two seriously injured people based on the MAIS3+ definition for each road death in Finland and one in Lithuania (Figure 9, blue bars). As for serious injuries based on police records, the differences in serious injuries based on MAIS3+ per death do not necessarily mean that fewer people are injured for every road death in Lithuania or Finland. These countries, as well as other countries, are in the process of improving the quality of the MAIS3+ data. The challenge is to capture all serious injuries that occur in traffic collisions, because hospitals record injuries from all causes and in some cases apply a different code (using the International Classification of Diseases – ICD). Also, differences may arise due to differences in travel mode use: use of bicycles or motorcycles leads to a much higher ratio between MAIS3+ and deaths than pedestrians or car occupants.

<sup>15</sup> Broughton et al. (2008), Estimating the real number of road accident casualties, Final deliverable D.1.15, SafetyNet, <https://bit.ly/3txp0Dz>. Participating countries: Austria, Czechia, France, Greece, Hungary, the Netherlands, Spain and the UK.

**Figure 9.** Number of seriously injured recorded in national statistics per single road death per country in the last three years ranked alphabetically. Numbers between countries are not comparable. 2021-2023 average or the latest three years available. <sup>(1)</sup>2020-2022, <sup>(2)</sup>2019-2021. SE (dark brown bar) - hospital data. NL (dark brown bar) - MAIS2+, hospital data.



## 2.4 ANNUAL REDUCTION IN SERIOUS INJURIES STILL BEHIND ROAD DEATH REDUCTION

Figure 10 gives an overview of national progress in reducing the numbers of road deaths and serious injuries (based on each national definition) over the last ten years. The figure aims to indicate to what extent the two have moved at a similar pace. The average annual change<sup>16</sup> in road deaths is plotted on the horizontal axis, and the average annual change in serious injuries on the vertical axis. The EU averages of -2.4% and -1.5% respectively are shown by vertical and horizontal dotted lines. Green markers are

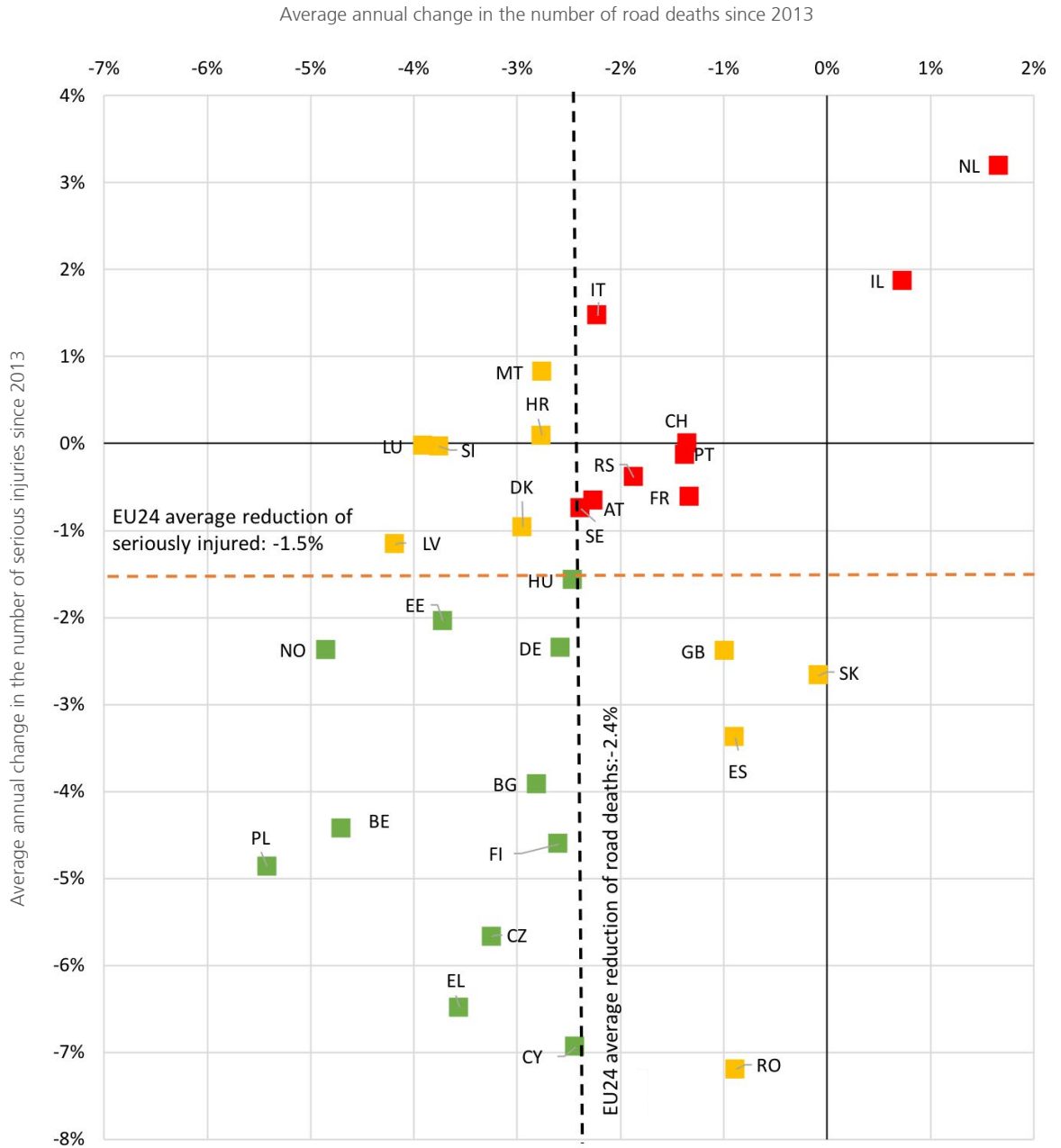
used for countries that performed better than the EU average in both death and serious injury reduction, red markers for those below the EU averages in both death and serious injury reduction and amber markers for all others – better than the average in deaths but not in serious injury or vice-versa.

Greece, Czechia, Belgium, Poland, Finland, Estonia, Germany, Bulgaria, Hungary, Cyprus and Norway have performed better than the EU average in reducing both serious injuries and road deaths since 2013. The annual reduction rates for serious injuries are also related to reporting rates.

<sup>16</sup> The average annual decrease is based on the entire time series of all the nine annual numbers of road deaths between 2013 and 2023, and estimates the average exponential trend. For more information, read the methodological note, <https://bit.ly/3VDIX75>

**Figure 10**  
**Estimated average annual change in the number of seriously injured according to the national definition over the period 2013-2023 for countries where data are available, plotted against the estimated average annual change in road deaths over the same period.**

The years covered vary: 2013-2022: AT, BE, DK, ES, IT, LU, NL, PT, NO, 2013-2021: MT, RO, 2014-2022: FI, MAIS3+: IT, IL. EU24: EU27 excluding LT and IE due to inconsistent trend data and RO due to lack of updated data.





## IRELAND STUDY ON SERIOUS INJURIES USING HOSPITAL DATA

In 2022, the Road Safety Authority (RSA) in Ireland, in collaboration with the Irish Health Service Executive and Trinity College Dublin, launched a project to study hospital data and apply the MAIS3+ serious injury definition. The study also focused on all casualties who were hospitalised with injuries of any severity following a road traffic collision.

The national definition of a serious injury followed by the Irish police includes all casualties who were in hospital as in-patients. Hence, the number of all hospitalised casualties was compared with the total of serious injuries as recorded by the police, to have an indicator of the size of the difference between the data sources.

The results confirmed that, as in other European countries, police data alone understated the number of serious injuries: the total of hospitalised casualties from road traffic collisions over 2014-2022 (18,021) was 1.7 times higher than the number of serious injuries recorded by the police (10,687). Of all hospitalised, 23% (3,989) sustained MAIS3+ injuries. The number of all hospitalised casualties and MAIS3+ injuries increased over the years under study, and was the highest in 2022.

The RSA is currently working on the preparation of a series of reports on serious injuries, using hospital and police records as the data sources (2014-2022). The first report of this series is focused on cyclists, as they accounted for the highest discrepancy between data sources: the number of hospitalised cyclists was between 2 and 3 times higher than the number of cyclists in police records.<sup>17</sup>

<sup>17</sup> RSA (2024) Serious injuries in pedal cyclists in hospital and An Garda Síochána data, <https://tinyurl.com/3m7ryxf>

## RECOMMENDATIONS TO NATIONAL GOVERNMENTS

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- Set national reduction targets for serious injuries based on MAIS3+ alongside deaths in upcoming road safety strategies.
- Collect serious injury data according to the MAIS3+ definition and continue collecting data based on national definitions.
- Include effects on the number of serious injuries in the impact assessment of road safety measures.
- Streamline the emergency response chain and increase the quality of trauma management in order to mitigate collision consequences more effectively.

## RECOMMENDATIONS TO THE EU

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- Adopt a new joint-EU strategy to tackle serious injuries involving all directorates general (DGs) in particular the DG for health.
- Adopt a new EU health strategy including road traffic injury prevention measures.
- Prioritise short-term measures that can be implemented with existing knowledge, e.g. measures to improve speed limit compliance will reduce injury severity and have an immediate effect.
- Work with Member States to ensure that they collect and report data on serious injuries using the common EU definition of MAIS3+; support Member States with the training of data-handling professionals;
- Continue to review the procedures used by Member States to estimate the number of people seriously injured to achieve comparability even though a variety of methods will be used in practice to implement the common definition.
- Include the number of seriously injured in the impact assessment of countermeasures.
- Treat road injuries and deaths as a public health problem as well as a mobility issue.



## PART III

# AN OVERVIEW OF EU AND NATIONAL ROAD SAFETY POLICIES

## 03

### 3.1 A MAJORITY OF COUNTRIES NOW HAVE 2030 NATIONAL ROAD SAFETY STRATEGIES

Country efforts will be critical across Europe for the implementation of the Safe System approach and in the EU for achieving the 2030 targets. Of the 32 PIN countries, 23 have reported having a new road safety strategy in place, and in a further two the plans are under development.

Both Sweden and the Netherlands work with a system of activities and objectives. (Table 1).

As part of its contract with the European Road Safety Observatory, the European Commission will be carrying out an assessment of Member State road safety strategies and developing a monitoring tool to follow-up implementation.<sup>18</sup> The first version of the monitoring tool should be available in 2024.

<sup>18</sup> Yannis, G., Folla, K., Kasselouris K., (2024) Monitoring National Road Safety Strategies in the EU, <https://tinyurl.com/ybxwa5pn>



Table 1.  
Road safety  
strategies  
in the PIN  
countries.

	New National Road Safety Strategy	Time period	Road death reduction target	Serious injury reduction target
AT <sup>19</sup>	YES, finalised	2021-2030	50% (2017-2019av.-2030)	50% (2017-2019av.-2030)
BE <sup>20</sup>	YES, finalised	2021-2030/2050	50%, fewer than 320 by 2030, 0 by 2050	50%, fewer than 1800 by 2030, less than 360 by 2050
BG <sup>21</sup>	YES, finalised	2020-2030	50% (2019-2030)	50% (2019-2030)
CY <sup>22</sup>	YES, finalised	2021-2030	50% (2019-2030)	50% (2019-2030)
CZ <sup>23</sup>	YES, finalised	2021-2030	50% (2017-2019av.-2030)	50% (2017-2019av.-2030)
DE <sup>24</sup>	YES, finalised	2021-2030	40% (2021-2030)	NO
DK <sup>25</sup>	YES, finalised	2021-2030	Max. 90 road deaths in 2030	Max. 900 seriously injured in 2030
EE <sup>26</sup>	Current	2016-2025	52% (2016-2025)	31% (2016-2025)
EL <sup>27</sup>	YES, finalised	2021-2030	50% (2019-2030)	50% (2019-2030)
ES <sup>28</sup>	YES, finalised	2022-2030	50% (2019-2030)	50% (2019-2030)
FI <sup>29</sup>	YES, finalised	2022-2026	50% (2020-2030)	50% (2020-2030)
FR <sup>30</sup>	YES, finalised	2023-2027	50% (2019-2030)	50% (2019-2030)
HR <sup>31</sup>	YES, finalised	2021-2030	50% (2019-2030)	50% (2019-2030)†
HU	YES, finalised	2023-2025	50% (2020-2030)	50% (2020-2030)
IE	YES, finalised	2021-2030	50% (2017-2019av.-2030)	50% (2017-2019av.-2030)
IT <sup>32</sup>	YES, finalised	2021-2030	50% (2019-2030)	50% (MAIS3+) (2019-2030)
LU <sup>33</sup>	Current	2019-2023	NO (Vision Zero)	NO (Vision Zero)
LV <sup>34</sup>	YES, finalised	2021-2027	50% (2020-2030)	50% (2020-2030)
LT <sup>35</sup>	YES, finalised	2020-2030	50% (2019-2030)	50% (2019-2030)
MT	Current	2014-2024	NO	NO
NL <sup>36</sup>	Activity plans finalised	2018-2030	NO	NO
PL <sup>37</sup>	YES, finalised	2021-2030	50% (2019-2030)	50% (2019-2030)
PT <sup>38</sup>	YES, finalised	2022-2030	50% (2019-2030)	50% (2019-2030)
RO <sup>39</sup>	YES, finalised	2022-2030	50% (2019-2030)	50% (2019-2030)
SE	Management by objectives	2020-2030	50% (2017-2019av.-2030)	25% (2017-2019av.-2030)
SI <sup>40</sup>	YES, finalised	2023-2030	50%, fewer than 50 road deaths in 2030	50%, fewer than 400 by 2030
SK <sup>41</sup>	YES, finalised	2021-2030	50% (2020-2030)	50% (2020-2030)
UK <sup>42</sup>	NO, Road Safety Statement 2019	June 2019- June 2021	NO	NO
CH	Current	No time limit	Max. 100 road deaths by 2030	Max. 2,500 serious injuries by 2030
IL <sup>43</sup>	YES, finalised	2022-2027	50% (2021-2027), less than three deaths per billion-vehicle km	50% (2021-2030)
NO <sup>44</sup>	YES, finalised	2022-2025	Max. 50 deaths by 2030	Max. 350 serious injuries by 2030
RS <sup>45</sup>	YES, finalised	2023-2030	50% (2019-2030) and 0 children killed by 2030	50% (2019-2030)

<sup>19</sup> Austrian Road Safety Strategy 2021-2030, <https://bit.ly/3ys7rlg>

<sup>20</sup> All For Zero, <https://bit.ly/3N5FUQM>

<sup>21</sup> The National Strategy for Road Safety until 2030 has been adopted - State Agency for Road Safety, <https://bit.ly/37zu96e>

<sup>22</sup> Στρατηγικό Σχέδιο, <https://bit.ly/3alx6s9>

<sup>23</sup> Czech Road Traffic Safety Strategy 2021-2030, <https://bit.ly/3MYCAa0>

<sup>24</sup> Deutscher Bundestag, Verkehrssicherheitsprogramm der Bundesregierung 2021 bis 2030, <https://bit.ly/3FuVCCA>

<sup>25</sup> Road Safety Commission, 2021-2030 Action Plan, Summary, <https://bit.ly/3cdYuGA>

<sup>26</sup> Transpordiamet, Lehekülge ei leitud, <https://bit.ly/34FvRxI>

<sup>27</sup> National Road Safety Strategic Plan, Greece 2030, <https://bit.ly/30076b1>

<sup>28</sup> Estrategia de Seguridad Vial 2030, <https://bit.ly/42m4Qej>

<sup>29</sup> Government resolution: Transport Safety Strategy aims to improve the safety of all modes of transport - Ministry of Transport and Communications, <https://bit.ly/39Uw5XT>

<sup>30</sup> Driving safely and serenely on France's roads, <https://bit.ly/4bvQvax>

<sup>31</sup> Odluka o donošenju Nacionalnog plana sigurnosti cestovnog prometa Republike Hrvatske za razdoblje od 2021. do 2030, <https://bit.ly/3N3ginD>

<sup>32</sup> Piano Nazionale Sicurezza Stradale 2030, <https://bit.ly/3kUByJf>

<sup>33</sup> Plan d'action « sécurité routière » (2019-2023), <https://bit.ly/3vMmkkh>

<sup>34</sup> Satiksmes ministrija, Ceļu satiksmes drošības plāns 2021.-2027.gadam, <https://bit.ly/3g3t3Qp>

<sup>35</sup> Lietuvos Respublikos Vyriausybė (2020), Nutarimas dėl valstybinės eismo saugos programos „Vizija-nulis“ patvirtinimo, <https://bit.ly/34FqaQx>

<sup>36</sup> Veilig van deur tot deur, <https://bit.ly/38masPv>

<sup>37</sup> Narodowy Program Bezpieczeństwa Ruchu Drogowego 2021 - 2030, <https://bit.ly/3N35ohJ>

<sup>38</sup> Estratégia Nacional de Segurança Rodoviária 2021 - 2030, <https://visaozero2030.pt/>

<sup>39</sup> Strategia națională privind siguranța rutieră, <https://bit.ly/4ecriNN>

<sup>40</sup> Resolution on the national road traffic safety programme for the period from 2023 to 2030, <https://bit.ly/2SQOs7I>

<sup>41</sup> Bezpečnosť cestnej premávky, <https://bit.ly/3wfe4uJ>

<sup>42</sup> Department for Transport, The Road Safety Statement 2019, A Lifetime of Road Safety, <https://bit.ly/3yVeVkk>

<sup>43</sup> תוכנית הטיחות תחבורת הרכב 2021-2027, <https://bit.ly/3stGW19>

<sup>44</sup> Meld. St. 20 (2020-2021), Melding til Stortinget Nasjonal transportplan 2022-2033, <https://bit.ly/2TuDLrm>

<sup>45</sup> <https://www.abs.gov.rs/sr/propisi-71/strateski-dokumenti>

## 3.2 KPI DATA COLLECTION ACROSS THE PIN COUNTRIES

The EU's Road Safety Policy Framework 2021-2030 introduced, for the first time, a list of Key Performance Indicators (KPIs) which will be used to measure overall road safety performance. The KPIs were further detailed in the EU Strategic Action Plan on Road Safety.<sup>46</sup>

In an initial phase, eight KPIs will form the basis for monitoring progress in joint road safety work at EU, Member State, regional and local levels. The aim is to continue strengthening the existing KPIs and to develop additional ones.<sup>47</sup> To facilitate the work on data collection, the European Commission has offered financial support to Member States. The long-term goal is to collect comparable data, bearing in mind that some differences in national rules will constrain comparison for some indicators. Countries outside the EU may well find it helpful to adopt or adapt these KPIs and follow the EU monitoring and thus benefit from the experience gained by the participating Member States.

### THE EIGHT EU KPIS ARE:

1. Percentage of vehicles travelling within the speed limit
2. Percentage of vehicle occupants using the safety belt or child restraint system correctly
3. Percentage of riders of powered-two-wheelers and bicycles wearing helmets
4. Percentage of drivers driving within the legal limit for blood alcohol content (BAC)
5. Percentage of drivers not using a handheld mobile device
6. Percentage of new passenger cars with a Euro NCAP safety ranking equal or above a predefined threshold
7. Percentage of distance driven over roads with a safety rating above an agreed threshold
8. Time elapsed in minutes and seconds between the emergency call following a collision resulting in personal injury and the arrival at the scene of the collision of the emergency services.

Key Performance Indicators can give a more complete picture of the level of road safety than just numbers of road deaths and serious injuries and can help detect the emergence of problems at an earlier stage.<sup>48</sup> Furthermore, outcome targets can be set based on the data collected.

The 'Baseline' project, supported by the European Commission and coordinated by the VIAS Institute, was launched in 2020 to produce values for the EU Road Safety KPIs in the 18 Member States participating in the project. Each participating country provided between one and eight national KPI values that were comparable across countries and which met the minimum methodological requirements of the European Commission.<sup>49</sup> (see tables 2 and 3)

The 'Baseline' project ended in 2022. Among the conclusions drawn from the project:

- With the focus having been on developing a methodology that would allow for road safety indicators to be measured in a harmonised, internationally-comparable way, no supplementary contextual data were collected to explain factors that might contribute to the large variations that were found between countries.
- Contextual data are also critical for establishing the relationship between the KPI performance and the severity of the applicable traffic law. This could apply for example to speed limits and also alcohol limits amongst other areas.
- A degree of freedom was given to countries when applying the KPI methodologies, but comparability between countries would improve if the methodological options available to each country were limited.
- The relationship between the KPI performance and road safety outcomes still needs to be analysed.

<sup>46</sup> ETSC (2019), Briefing EU Strategic Action Plan on Road Safety, <https://bit.ly/36Ua5Xe>

<sup>47</sup> Ibid

<sup>48</sup> ETSC (2018) Briefing: 5<sup>th</sup> EU Road Safety Action Programme 2020-2030, <https://bit.ly/2LuTDBW>

<sup>49</sup> Baseline project, <https://baseline.vias.be/>

In 2023, as a follow-up to the 'Baseline' project, the 'Trendline' project was launched, supported by the European Commission and coordinated by SWOV.<sup>50</sup> In addition to the eight KPIs that had originally been defined by the European Commission and used within the 'Baseline' project, the 'Trendline' consortium will also identify some new indicators, develop appropriate methodologies and test these on a limited scale. The 'Trendline' project brings together 29 European Countries (including four observer countries). Participating Member States are indicated in Table 2.

In addition to the eight KPIs that had originally been defined by the European Commission and used within the 'Baseline' project, ten new 'experimental' indicators will be considered during the Trendline project:

- Driving under the influence of drugs;
- Share of 30km/h road lane lengths in urban zones;
- Red-light negotiations by road users;
- Compliance with traffic rules at intersections;
- Helmet wearing of personal mobility device (PMD) riders;
- Self-reported risky behaviour;
- Attitudes towards risky behaviour;
- Use of lights by cyclists in the dark;
- Enforcement of traffic regulations;
- Alternative speeding indicators.

A methodology will be developed for each of these 'experimental' indicators and data collection and analysis will take place on a limited scale in order to test the feasibility and reliability of the methodology.

Before the 'Baseline' project, countries applied different methodologies to collecting KPI data. Not all Member States were part of the 'Baseline' project and even those that were did not collect data for all KPIs. Some countries continue to collect KPI data according to their own methodologies, not necessarily comparable with other countries. The level of detail of each KPI and the frequency of how often KPI data are collected therefore continues to differ between countries.

There is some way to go in terms of developing EU road safety KPIs, collecting the data and setting KPI targets (Tables 2 and 3). The KPI on safety belts seems the most widely collected, with 31 PIN countries reporting they collect or plan to collect data in the upcoming year for this KPI. Likewise, KPIs for speed compliance and the use of protective equipment are or soon will be widely used. The infrastructure, post-crash care and vehicle safety KPIs seem the least well advanced.

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<sup>50</sup> Trendline project, <https://trendlineproject.eu/>

**Table 2.**  
Progress  
towards  
collecting  
EU KPIs and  
setting KPI  
targets.

=  
 the KPI data are  
 being collected  
 or will be  
 collected in the  
 near future,  
 =  
 the KPI data  
 are not being  
 collected,  
 =  
 under discussion  
 =  
 the information  
 was not  
 available at the  
 time of going  
 to print.

	TRENDLINE PROJECT	SPEED	SPEED TARGET	SAFETY BELT	SAFETY BELT TARGET	PROTECTIVE EQUIPMENT	PROTECTIVE EQUIPMENT TARGET	ALCOHOL	ALCOHOL TARGET
AT	YES	YES	YES	YES	YES	YES	YES	YES	YES
BE	YES	YES	YES	YES	YES	YES	YES	YES	YES
BG	YES	YES	n/a	YES	n/a	YES	n/a	YES	n/a
CY	YES	YES	NO	YES	NO	YES	NO	YES	NO
CZ	YES	YES	YES	YES	YES	YES	YES	YES	YES
DE	YES	NO	NO	YES	NO	YES	NO	YES	NO
DK	YES	YES	NO	YES	NO	YES	NO	NO	n/a
EE	Observer	YES	YES	YES	YES	YES (bicycle)	YES	YES	YES
ES	YES	YES	NO	YES	NO	YES	NO	YES	NO
EL	YES	YES	YES	YES	YES	YES	YES	YES	YES
FI	YES	YES	NO	YES	NO	YES	NO	YES	NO
FR	YES	YES	n/a	YES	n/a	YES	n/a	YES	n/a
HR	YES	YES	n/a	YES	n/a	YES	n/a	YES	n/a
HU	YES	NO	NO	YES	NO	YES	NO	NO	NO
IE	YES	YES	NO	YES	NO	YES	NO	YES	NO
IT	YES	YES	tbd	YES	tbd	YES	tbd	YES	tbd
LU	YES	YES	n/a	YES	n/a	YES	n/a	YES	n/a
LV	YES	YES	n/a	YES	n/a	YES	n/a	YES	n/a
LT	YES	YES	n/a	YES	n/a	n/a	n/a	YES	n/a
MT	Observer	YES	tbd	YES	n/a	YES	tbd	NO	n/a
NL	YES	YES	n/a	YES	n/a	YES	n/a	YES	n/a
PL	YES	YES	NO	YES	NO	YES	NO	YES	NO
PT	YES	YES	YES	YES	YES	YES	YES	YES	YES
RO	YES	NO	NO	NO	NO	NO	NO	NO	NO
SE	YES	YES	YES	YES	YES	YES	YES	YES	YES
SI	YES	YES	n/a	YES	n/a	YES (bicycle)	n/a	YES	n/a
SK	YES	YES	n/a	YES	n/a	YES	n/a	NO	n/a
UK	Not applicable	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
GB	Not applicable	YES	n/a	YES	n/a	YES	n/a	YES	n/a
CH	Observer	YES	NO	YES	NO	YES	NO	YES	n/a
IL	Not applicable	YES	YES (tbd)	YES	YES (tbd)	NO	NO	YES	NO
NO	Observer	YES	YES	YES	YES	YES (bicycle)	YES	YES	YES
RS	Not applicable	YES	YES	YES	YES	YES	YES	YES	YES

**Table 3.**  
Progress  
towards  
collecting  
EU KPIs and  
setting KPI  
targets.

=  
 the KPI data are  
 being collected  
 or will be  
 collected in the  
 near future,  
 =  
 the KPI data  
 are not being  
 collected,  
 =  
 under discussion  
 =  
 the information  
 was not  
 available at the  
 time of going  
 to press.

	DISTRACTION	DISTRACTION TARGET	VEHICLE SAFETY	VEHICLE SAFETY TARGET	INFRA-STRUCTURE	INFRA-STRUCTURE TARGET	POST-CRASH CARE	POST-CRASH CARE TARGET
AT	YES	YES	YES	tbd	YES	YES	YES	tbd
BE	YES	YES	YES	n/a	YES	n/a	YES	n/a
BG	YES	tbd	YES	tbd	NO	NO	NO	NO
CY	YES	NO	YES	NO	YES	NO	YES	YES
CZ	YES	YES	YES	YES	YES	YES	YES	YES
DE	YES	NO	NO	NO	NO	NO	YES	NO
DK	YES	NO	NO	NO	NO	NO	NO	NO
EE	YES	YES	NO	NO	tbd	YES	NO	tbd
ES	YES	NO	YES	NO	NO	NO	NO	NO
EL	YES	YES	YES	YES	NO	NO	YES	YES
FI	YES	NO	YES	NO	YES	tbd	YES	NO
FR	YES	n/a	YES	n/a	YES	YES	NO	n/a
HR	YES	n/a	YES	n/a	YES	YES	YES	n/a
HU	YES	NO	NO	NO	tbd	tbd	NO	NO
IE	YES	NO	YES	NO	NO	NO	NO	NO
IT	YES	tbd	YES	tbd	tbd	tbd	YES	tbd
LU	YES	n/a	n/a	n/a	n/a	n/a	n/a	n/a
LV	YES	n/a	YES	n/a	YES	YES	YES	n/a
LT	YES	n/a	YES	n/a	YES	YES	YES	n/a
MT	YES	tbd	YES	NO	NO	NO	YES	tbd
NL	YES	n/a	YES	n/a	YES	n/a	YES	YES
PL	YES	NO	NO	NO	NO	NO	NO	NO
PT	YES	YES	YES	YES	YES	YES	YES	YES
RO	NO	NO	NO	NO	NO	NO	NO	NO
SE	YES	NO	YES	YES	YES	YES	YES	NO
SI	NO	NO	NO	NO	NO	YES	NO	NO
SK	YES	n/a	YES	n/a	NO	NO	NO	n/a
UK	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
GB	YES	n/a	n/a	n/a	NO	NO	n/a	n/a
CH	YES	NO	NO	NO	NO	NO	NO	NO
IL	YES	NO	NO	NO	NO	NO	NO	NO
NO	NO	n/a	NO	n/a	YES	YES	NO	n/a
RS	YES	NO	NO	YES	NO	YES	YES	YES

**Table 4.**  
Progress towards collecting EU experimental KPIs.

= the KPI data are being collected or will be collected in the near future,  
 = the KPI data are not being collected,  
 = the KPI data are being collected in surveys  
 = data are being collected in the ESRA studies and  
 = the information was not available at the time of going to print.

	1. Driving under the influence of drugs	2. Share of 30km/h road lane lengths in urban zones	3. Red-light negotiations by road users	4. Compliance with traffic rules at intersections	5. Helmet wearing of PMD riders	6. Self-reported risky behaviour	7. Attitudes towards risky behaviour	8. Use of lights by cyclists in the dark	9. Enforcement of traffic regulations	10. Alternative speeding indicators
AT	NO	NO	YES <sup>(1)</sup> (one-off KfV study)	YES (KfV survey)	YES (KfV survey)	ESRA3	ESRA3	NO	YES (only global figures)	NO
BE	YES	NO	NO	NO	NO	YES	YES	YES	NO	NO
BG	NO	YES	NO	NO	NO	YES	YES	NO	NO	NO
CY	NO	NO	YES	YES	NO	NO	NO	NO	NO	NO
CZ	YES	NO	NO	NO	NO	NO	NO	NO	NO	NO
DE	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
DK	YES combined with alcohol KPI	NO	NO	NO	YES <sup>(2)</sup> the helmet wearing is registered	NO	NO	NO	NO	NO
EE	NO	NO	YES for both drivers and pedestrians	NO	NO	YES	YES	NO	YES	NO
ES	YES	NO	NO	NO	NO	NO	NO	NO	NO	NO
FI	NO	YES (studies)	YES	YES	NO	ESRA studies	ESRA studies	YES	YES	YES <sup>(3)</sup>
FR	YES	NO	NO	NO	YES	YES	YES	YES	YES	YES
EL	NO	NO	NO	NO	NO	YES	YES	NO	NO	NO
HR	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
HU	NO	NO	YES	YES	YES	NO	NO	NO	NO	NO
IE	NO	NO	YES	YES	YES	YES	YES	NO	NO	YES
IT	NO	NO	NO	NO	YES	YES	YES	NO	NO	YES
LU	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
LV	NO	NO	tbd	tbd	YES	ESRA3	ESRA3	NO	NO	YES
LT	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
MT	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
NL	YES	YES (by 2025)	NO	NO	YES	YES (survey)	YES (survey)	YES	NO	NO
PL	NO	NO	NO	NO	YES	NO	NO	YES	YES	YES
PT	YES	YES	YES	YES	YES	NO	NO	NO	YES	YES
RO	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
SE	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
SI	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
SK	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
UK	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
GB	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
CH	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
IL	NO	NO	YES (survey)	NO	NO	ESRA survey 2023	ESRA survey 2023	NO	NO	NO
NO	YES	NO	NO	NO	NO	NO	NO	NO	NO	NO
RS	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO

<sup>(1)</sup> [https://www.kfv.at/download/38-rotlichtmissachtung-im-strassenverkehr/?wpdm\\_dl=19434&refresh=660d1a31a525f1712134705](https://www.kfv.at/download/38-rotlichtmissachtung-im-strassenverkehr/?wpdm_dl=19434&refresh=660d1a31a525f1712134705)

<sup>(2)</sup> DK - In Denmark, two other alternative KPIs have been introduced: one for traffic education in primary school and one for the share of municipalities that have an adopted action plan for road safety

<sup>(3)</sup> FI - lots of speed statistics on main roads, for example average speed, overspeed%, over 10 km/h overspeed %, including all traffic, not just free flow

## RECOMMENDATIONS TO NATIONAL GOVERNMENTS

- As regards national road safety strategies and KPIs:
  - Fast-track data collection for the Key Performance Indicators included in the EU Road Safety Policy Framework 2021-2030 and report them to the European Commission.

- For countries who have not yet done so: set targets to halve the number of road deaths and serious injuries over the period 2020-2030 in line with the EU Road Safety Policy Framework 2020-2030.
- Set ambitious national KPI targets and work towards achieving them.
- Allocate the necessary budget to collect data on KPIs and on serious injuries according to MAIS3+.

### 3.3 CURRENT EU ROAD SAFETY POLICY DEVELOPMENTS

The EU Strategic Action Plan for Road Safety<sup>51</sup> sets a new target to halve road deaths by 2030 compared to 2020 levels, as well as, for the first time, a target to halve the number of seriously injured. The EU Road Safety Policy Framework 2021-2030<sup>52</sup>, introduced eight Key Performance Indicators to measure the overall safety performance of EU Member States as well as measures to reach the strategy's targets.

2024 is a significant year politically, with European Parliamentary elections and the appointment of a new European Commission. Preparations will also begin for the next seven-year EU budget (2028-2034).

#### 3.3.1 Latest on road safety legislative proposals

On 1 March 2023, the European Commission published proposals for three pieces of road safety legislation known as the 'road safety package': the revision of the EU driving licence directive, the revision of the cross-border enforcement (CBE) directive and a proposal for a new EU directive on driving disqualifications.<sup>53</sup> In July of the same year, the Commission also published a proposal for the revision of the directive on the maximum weights and dimensions of road vehicles<sup>54</sup>.

The road safety package, published in March 2023, was the flagship road safety initiative of the 2019-2024 Commission. Regrettably, some of the most significant planned changes to driving licences, including allowing 16-year-olds to drive cars, and 17-year-olds to drive lorries, are likely to make road safety worse. Likewise, the separate proposal to change the regulations on weights and dimensions of lorries will likely lead to an increase in the number of 'megatrucks' on EU roads, with no additional training requirements for drivers. These longer

and heavier vehicles will also be driving on road infrastructure that was not designed for them – with potentially devastating consequences.<sup>55</sup>

Negotiations on the four legislative proposals took place throughout 2023 and the first half of 2024.

In the following section, we examine the status of each proposal in turn, and give ETSC's perspective on where improvements can be made.

#### PROPOSAL FOR A REVISION OF THE DRIVING LICENCE DIRECTIVE

The European Commission proposal on the revision of the driving licence directive aims to update the rules governing driver licensing across the EU.

The proposed changes include:

- a two-year probationary period with zero alcohol tolerance for novice drivers;
- accompanied driving from the age of 17 (category B and C licences);
- mandatory self-assessment of fitness to drive for Group 1 drivers (car and motorcycle), decreased licence validity after the age of 70;
- possibility for alcohol-dependent drivers to take part in alcohol interlock rehabilitation programmes;
- category B licence holders to be permitted to drive alternatively-fuelled vehicles up to 4.25 tonnes;
- B1 licence holders to be authorised to drive category B vehicles limited in weight (2.5 tonnes) and speed (45 km/h).

#### Negotiations

Negotiations on this proposed legislation are still ongoing and will resume after the European elections in June 2024. The Council agreed its position in December 2023.<sup>56</sup> The European Parliament agreed its position in February 2024.<sup>57</sup>

<sup>51</sup> European Commission (2018) Strategic Action Plan on Road Safety, <https://bit.ly/2xHG5w>

<sup>52</sup> European Commission (2020) Next steps towards 'Vision Zero' EU road safety policy framework 2021-2030, <https://bit.ly/3MvAzF0>

<sup>53</sup> European Commission (2023) European Commission proposes updated requirements for driving licences and better cross-border enforcement of road traffic rules, <https://bit.ly/3O83rV8>

<sup>54</sup> Proposal for a Revision of the Weights and Dimensions Directive 2023/0265, <https://bit.ly/3YqsZzY>

<sup>55</sup> ETSC (2023) Position on Revision of Weights and Dimensions 96/53/EC, <https://tinyurl.com/2tukxtr5>

<sup>56</sup> Council General Approach: Proposal for a Directive of the European Parliament and of the Council on driving licences, <https://tinyurl.com/4f2t8meh>

<sup>57</sup> European Parliament first reading: Proposal for a Directive of the European Parliament and of the Council on driving licences, <https://tinyurl.com/3sue92ep>

### *ETSC position*

Elements of the Commission's original proposals were welcomed by ETSC including the proposed probationary period for novice drivers. The decision to allow drivers with alcohol abuse disorders to drive as part of an alcohol interlock rehabilitation programme was also welcomed.

ETSC remains concerned about the negative road safety impact of the Commission's proposal to reduce the age for accompanied driving for category C<sup>58</sup> licence holders to 17.<sup>59</sup> The same concerns apply to the European Parliament's proposal to allow category D<sup>60</sup> vehicles to be driven by 18-year-olds in certain circumstances.<sup>61</sup>

### **PROPOSAL FOR A REVISION OF THE CROSS BORDER ENFORCEMENT (CBE) DIRECTIVE**

The Commission's proposal for a revision of the CBE directive aimed to further facilitate the enforcement of financial penalties against drivers who commit an offence in a different EU Member State to the one where the vehicle is registered.

Negotiations on this proposal ended in April 2024. It must now be written into national law in EU Member States before coming into force.

Besides the automated exchange of information between national authorities, new mutual assistance procedures will be introduced under the revised directive to identify the offender and enforce fines. Importantly, some new offences have been included in the legislation such as 'hit and run' – when a driver leaves the scene of a crash – in addition to the most frequent and egregious offences, such as speeding, drink- and drug-driving.

ETSC has welcomed the conclusion of negotiations on this proposal.<sup>62</sup>

### **PROPOSAL FOR A NEW DIRECTIVE ON THE UNION-WIDE EFFECT OF CERTAIN DRIVING DISQUALIFICATIONS**

This proposal states that driver disqualification should apply, in future, in all EU Member States, not just the country where the driving offences were committed. It lays down rules to facilitate this including a duty to notify the Member State that issued the driving licence of a driving disqualification imposed for the most dangerous offences including drink-driving, speeding (although Member States may exempt the driver if the speed limits were exceeded by less than 50 km/h), driving under the influence of drugs and a traffic offence that has caused death or serious bodily injury.

### *Negotiations*

The European Parliament agreed its position in February 2024.<sup>63</sup> The Council is yet to publish its common position. Once the Council has reached its position and following the European Parliament elections in June 2024, negotiations can take place between the institutions to reach a final deal.

### *ETSC position*

ETSC supports the gradual introduction of the mutual recognition of non-financial penalties including driving disqualifications and demerit point systems in EU road safety legislation. This would build upon the current CBE Directive on financial penalties as a logical next step and feed into the current revision of the driving licence directive.

Non-financial penalties such as demerit point systems, which can ultimately lead to driver disqualification, have a strong deterrent effect and can improve road safety.<sup>64</sup> This should also end impunity; non-resident drivers should not only have to pay fines but also face driver disqualification at home and abroad.

<sup>58</sup> Category C - goods vehicles weighing more than 3,500 kg and seating not more than eight passengers

<sup>59</sup> ETSC (2022) Briefing – Reducing the minimum age for driving an HGV, Bus or Coach in the EU would increase safety risks, <https://tinyurl.com/364p6utb>

<sup>60</sup> Category D - passenger vehicles for more than eight passengers

<sup>61</sup> ETSC (2024) Road Safety Priorities for the EU 2024-2029, <https://tinyurl.com/3uh8s8am>

<sup>62</sup> <https://tinyurl.com/42v47d79>

<sup>63</sup> European Parliament first reading: Proposal for a Directive of the European Parliament and of the Council on the Union-wide effect of certain driving disqualifications, <https://tinyurl.com/2s46d723>

<sup>64</sup> Van Schagen I, Machata, K. (2012), The Best Point Handbook, Getting the best out of a Demerit Point System. EU funded project, <https://bit.ly/3ceulBj>



## PROPOSAL FOR A DIRECTIVE ON THE MAXIMUM WEIGHTS AND DIMENSIONS OF ROAD VEHICLES

The Weights and Dimensions Directive 96/53/EC<sup>65</sup> sets out maximum authorised weights and dimensions (length, width and height) for heavy-duty vehicles (HDVs), such as lorries and buses, that circulate on EU roads.

In July 2023, the European Commission put forward a proposal to amend the directive.<sup>66</sup> One of the most important elements of the European Commission proposal is that it would raise the weight limit for zero-emission vehicles from the current 40t to 44t. The revision also proposes to raise the maximum weight for intermodal zero-emission transport. Road operators using their lorries, trailers and semitrailers in intermodal operations would benefit from a 4-tonne higher weight limit and a height limit up to 4m 30 cm for high cube sea containers. However, the proposal also aims to lift restrictions on the cross-border transport of Longer and/or Heavier Vehicles (LHVs) without requiring them to be zero-emission. This contradicts new requirements for zero-emission trucks up to 44 tonnes.

### *Negotiations*

The European Parliament has agreed its position.<sup>67</sup> The Council may adopt its general approach in June 2024.

### *ETSC position*

ETSC has serious concerns about the impact of Longer and Heavier Vehicles (LHV) on road safety.<sup>68</sup> These vehicles have been allowed to circulate under strict conditions, as part of trials or special bilateral agreements, but all the impacts of wider adoption have not been fully assessed.

One of the main concerns, beyond all the risks associated with HGVs within the current permitted weights and dimensions, is that greater LHV circulation could lead to a faster degradation in the road infrastructure which would also require more frequent maintenance.

### 3.3.2 EU Policy – looking ahead

A report on how the EU Road Safety Framework is being implemented is due in 2025 and is currently being prepared by the European Commission. ETSC has reviewed some of the key components of the strategy and has made recommendations for next steps ahead of the start of the new European political mandate in the second half of 2024.<sup>69</sup> At European level, there is an urgent need for strong leadership and action on road safety to get things back on track. It is vital that the newly appointed decision makers in the European Parliament and Commission hit the ground running and act quickly.

Transport Ministers meeting in June 2024 are due to adopt a declaration setting out their priorities for improving road safety in the coming years and responding to the recommendations set out in the recent European Court of Auditors Report.<sup>70</sup> It builds upon the last Valletta Declaration from 2017 which laid a cornerstone for the current EU Action Plan for Road Safety and demonstrated Member State commitment to improving road safety.<sup>71</sup>

<sup>65</sup> Council Directive 96/53/EC laying down for certain road vehicles circulating within the Community the maximum authorised dimensions in national and international traffic and the maximum authorised weights in international traffic, <https://tinyurl.com/5n6jc6vf>

<sup>66</sup> Proposal for a Revision of the Weights and Dimensions Directive 2023/0265, <https://bit.ly/3YqsZzY>

<sup>67</sup> European Parliament's first reading: Revision of the Weights and Dimensions Directive, <https://tinyurl.com/yjzfjn6v>

<sup>68</sup> ETSC (2023) Briefing: Revision of Directive 96/53/EC on maximum authorised weights and dimensions in national and international traffic, <https://tinyurl.com/44d2bn2f>

<sup>69</sup> ETSC (2024) Road Safety Priorities for the EU 2024-2029, <https://tinyurl.com/3uh8s8am>

<sup>70</sup> ECA (2024) Special report 04/2024: Reaching EU road safety objectives – Time to move up a gear, <https://tinyurl.com/58hkcfxd>

<sup>71</sup> Council conclusions on road safety - endorsing the Valletta Declaration of March 2017, <https://tinyurl.com/yubkxsnd>

## EUROPEAN COURT OF AUDITORS REPORT – REACHING EU ROAD SAFETY OBJECTIVES – TIME TO MOVE UP A GEAR

In March 2024, the European Court of Auditors issued its first ever report on road safety, concluding that the EU and its Member States will need to “move their efforts up a gear” to reach the 2030 targets.<sup>72</sup>

The EU’s external auditors spent almost a year analysing the EU27’s current road safety efforts and visited four EU Member States to carry out checks. While commending the EU’s overall strategic approach, they warn that implementation is lacking or non-existent in several key areas.

The auditors found that monitoring Member State progress in improving road safety remained a challenge for the European Commission. For instance, they found a lack of assessment by the European Commission on how Member State road safety strategies will help achieve EU road safety ambitions. A lack of sufficient data comparability between Member States was also considered by the auditors to be hampering the Commission’s ability to monitor progress adequately, particularly as regards serious injuries. The auditors found a lack of harmonisation in how Member States classify data on serious injuries, leaving the Commission “unable to obtain an accurate overview of serious injuries at EU level and design well-targeted actions to reduce their number.”

### *European Commission response to the ECA report<sup>73</sup>*

In its official response to the ECA report, the European Commission reported that a monitoring tool will be developed by the European Road Safety Observatory consultants to “assist Member States in monitoring progress and provide the Commission with a much better overview and assessment of the situation across the EU.” A first version of the tool is due to be ready later in 2024. The European Commission also accepted the auditors’ recommendations to improve the comparability of data both for serious injuries and the Key Performance Indicators and commits to continue working with Member States on both issues.

The Commission also committed to “consider what further guidance may be appropriate” on speed, as the auditors noted that the Commission had not issued a Recommendation on that topic, although it is one of the main factors in road deaths and serious injuries.

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<sup>72</sup> European Court of Auditors (2024) Reaching EU road safety objectives, Time to move up a gear, <https://tinyurl.com/4294wr74>

<sup>73</sup> Replies of the European Commission to the European Court of Auditors (2024) Special report: Reaching EU road safety objectives, Time to move up a gear, <https://tinyurl.com/37zuyap6>

## PREPARATION OF THE NEXT EU BUDGET PERIOD (2028-2034)

Preparations are underway for the next EU budget 2028-2034 known as the Multiannual Financial Framework (MFF). The current EU Strategic Action Plan on Road Safety included funding measures which are supported by the current 2021-2027 EU budget. This framework included new requirements the Member States must fulfil on achievement and assessment if they want to receive funds.<sup>74</sup>

Funding needs to be identified within the new EU budget to continue to support investment in new road safety measures and prevent the costs to society. EU funds should support the implementation of those measures included in the EU's new Road Safety Programme 2020-2030 which have the highest lifesaving potential.

## PREPARATION OF THE NEXT VEHICLE SAFETY REGULATIONS

The EU has the exclusive competence to set minimum safety standards for all new vehicles sold on the EU market. These standards, set out in the General Safety Regulation (GSR), were last updated in 2019 and are due for revision in 2027.<sup>75</sup>

The life-saving potential of these updated safety measures was estimated to be 25,000 deaths and 140,000 serious injuries prevented over 15 years.<sup>76</sup> However, some of the technical standards for these measures fell short of expectations due to industry pressure, proclaimed technological

immaturity and/or ineffective data privacy rules and could therefore fail to bring the hoped-for safety benefits.<sup>77</sup> Moreover, technological progress since 2019 has evolved rapidly and new promising safety measures are already available on the market. This underlines the urgency for a swift revision of the GSR in 2027 with a view to fixing past missed opportunities and incorporating the most promising new technologies.

One worrying trend is that, while most new vehicles fall under the requirements of the GSR, certain vehicles can instead be approved under the so-called Individual Vehicle Approval (IVA) procedure, which includes fewer safety requirements. ETSC and others have raised concerns over this loophole allowing large American pickup trucks – which are particularly dangerous for vulnerable road users – to bypass safety and environmental regulations.<sup>78</sup> Vehicles are also becoming heavier and larger with dire consequences for safety.<sup>79</sup>

Minimum standards for new motorcycles should also be updated, to take into account technological progress. It is time for the EU to mandate compulsory Anti-lock Braking Systems (ABS) for all motorcycles and study the feasibility of mandating ABS for mopeds. Advanced driver-assistance systems (ADAS) installed in other vehicles, such as Automated Emergency Braking, should also detect motorcycles.

<sup>74</sup> As noted in European Court of Auditors (2024) Reaching EU road safety objectives: Time to move up a gear Enabling condition 3.1.8 Annex IV of Regulation (EU) 2021/1060, <https://tinyurl.com/fj5a6rdp7>

<sup>75</sup> Regulation (EU) 2019/2144 on type-approval requirements for motor vehicles and their trailers, and systems, components and separate technical units intended for such vehicles, as regards their general safety and the protection of vehicle occupants and vulnerable road users, <https://eurlex.europa.eu/eli/reg/2019/2144/oj>

<sup>76</sup> TRL (2018), Cost-effectiveness analysis of policy options for the mandatory implementation of different sets of vehicle safety measures, <https://bit.ly/3x4beNf>

<sup>77</sup> ETSC (2023) Mandatory distraction warning systems won't detect most important types of distraction, <https://bit.ly/3YMgr4E>; ETSC (2022) Opinion: will Intelligent Speed Assistance (ISA) live up to its promise?, <https://bit.ly/3Vpvxix>; ETSC (2022) Car black boxes will be virtually useless to safety researchers, <https://bit.ly/3VtrSjA>

<sup>78</sup> ETSC (2023) Concerns over loopholes allowing American pickup trucks to bypass safety and environmental regulations, <https://bit.ly/3IK2A9l>

<sup>79</sup> VIAS (2023) in ETSC (2023) SUVs and Pick Ups Make Roads Less Safe, <https://tinyurl.com/bdcvkssw>

## RECOMMENDATIONS TO THE EU

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- Within the context of the revision of the Driving Licence Directive 2006/12640:
  - Support the new probationary period for novice drivers with a zero tolerance for drink and drug-driving.
  - Do not allow EU Member States to introduce an accompanied driving scheme for 17-year-old lorry drivers.
  - Do not oblige EU Member States to further reduce the minimum recommended age for solo driving for bus and lorry drivers to 18 and 19 and delete the possibility given to Member States to further reduce the minimum age in the context of pilot projects.
  - Remove the possibility for 16-year-olds to drive a car up to 2.5 tonnes, speed limited to 45 km/h under the B1 licence.
  - Develop minimum standards for driver training and traffic safety education with gradual alignment in the form, content and outcomes of driving courses across the EU.
  - Encourage EU Member States to set up and implement a demerit point system and to introduce stricter systems during a probationary period.
  - Examine the expansion of continuous training for non-professional drivers post-licence.
- Within the context of the newly adopted revised Directive 2015/413 concerning cross-border exchange of information on road safety-related traffic offences<sup>80</sup>, support Member States in preparing for implementation.
- Within the context of the negotiations on the proposal for a Directive on the Union-Wide Effect of Certain Driving Disqualifications:<sup>81</sup>
  - Support the principle of EU-wide recognition of certain driving disqualifications.
  - Encourage EU Member States to set up and implement a demerit point system.
  - Encourage all EU Member States to set up virtual driving licences with penalty points for non-resident drivers to deter recidivists offending while abroad.
- Within the context of the revision of the Weights and Dimensions Directive, maintain the current Directive's framework on megatrucks.<sup>82</sup>

- As regards EU regulations of vehicles and vehicle technologies:
  - Ensure that all vehicles entering the EU comply with all relevant safety and environmental legislation, through updates to the requirements for Individual Vehicle Approval and the relevant type approval legislation.
  - Review maximum limits for the size and weights of cars and vans.
  - Prepare for the update of the General Safety Regulation by 7 July 2027 to account for the latest advancements in safety technology.
  - Update the minimum safety requirements for motorcycles and ensure that ADAS systems installed in other vehicles, such as Automated Emergency Braking, can detect motorcycles.
  - Ensure fair access to vehicle systems and data, particularly for governmental activities (such as road safety analysis and policy making as well as vehicle approval, periodic and roadside inspection).
- As regards EU Key Performance Indicators (KPIs):
  - In the medium term, set the KPI outcome targets to match the outcome performance of the three best performing countries for each KPI (when possible).
  - Publish updated data regularly, at least every two years, ahead of the EU Road Safety Results Conference.
  - Extend and improve the current KPIs based on ETSC recommendations.<sup>83</sup>
  - Continue to support Member States in collecting harmonised data.

Within the context of the EU budget and spending, present and future:

- Ensure EU funds support the implementation of those measures included in the EU Road Safety Programme 2021-2030 which have the highest lifesaving potential.
- Identify, within the new Multi-annual Financial Framework, investment in new road safety measures.
- Include socioeconomic costs to support investments in order to promote a safe road environment where every road user is included in the Safe System Approach.

<sup>80</sup> European Parliament legislative resolution of 24 April 2024 on the proposal for a directive of the European Parliament and of the Council amending Directive (EU) 2015/413 facilitating cross-border exchange of information on road-safety-related traffic offences, <https://bit.ly/4bEFCXB>

<sup>81</sup> Proposal for a Directive on the Union-wide effect of certain driving disqualifications, <https://bit.ly/3BD4wwk>

<sup>82</sup> ETSC (2023) ETSC Position on Revision on Weights and Dimensions, <https://tinyurl.com/2tukxtr5>

<sup>83</sup> ETSC (2019) Briefing: EU Strategic Action Plan on Road Safety, <https://bit.ly/3ihmcW7>

## PART IV

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# FINLAND: WINNER OF THE 2024 ROAD SAFETY PIN AWARD



# FINLAND

## WINNER OF THE 2024 ROAD SAFETY PIN AWARD

### INTERVIEW WITH LULU RANNE, FINNISH MINISTER OF TRANSPORT AND COMMUNICATIONS



Photo credit: Fanni Uusitalo

**This is the first time that Finland has won the ETSC PIN award. What measures have contributed to the sustained reduction in road deaths in Finland over the last decade?**

Traffic safety is developed in Finland in cooperation between different administrative branches. There is no single explanation for the decrease in road deaths in Finland, but it is rather the result of the combined effect of many different measures. It appears now that long-term cooperation and shared goals have produced results. The credit for this belongs to everyone contributing to road safety.

Finland's current Traffic Safety Strategy includes 103 measures to improve factors such as road user attitudes, legislation and traffic education. The objective of the strategy is zero road deaths in 2050.

Over the decades, road safety has clearly improved in Finland. For example, the number of collisions leading to the death of a pedestrian have decreased by 28% in ten years.

The improvement of road safety has been influenced by factors such as improving the traffic environment, changes in traffic behaviour, the development of car technology and urbanisation.

Speeds have a major impact on safety. Areas with a 30 km/h speed limit have become increasingly common in city centres in Finland. In addition, the directions of travel are increasingly separated and the use of seatbelts and cycling helmets have become more common than before, for instance.

In Finland, traffic safety is improved in cooperation between various authorities and organisations. The level of training and supervision must be adequate. In addition, healthcare professionals and supervisory authorities are increasingly trained on issues related to driving health.

Although we have succeeded in many things, we still have a long way to go. Traffic deaths cannot be the price we pay for mobility. The traffic environment must be a safe place for everyone to get around.

**The Finnish Traffic Safety Strategy (2022-2026) includes 'Vision Zero', with the target that no one should die or be seriously injured in traffic by 2050. What are the main priorities and objectives of the Strategy?**

The strategy includes specific measures for ministries, the police, organisations and schools. The strategy helps us approach road safety comprehensively from different perspectives.

The key idea is that road safety is a common concern for society as a whole. Indeed, many different parties in society were involved in its preparation and implementation, not just the transport sector.

The strategy aims at lifelong traffic education and bringing changes in traffic behaviour. For this reason, the strategy includes a lot of communication and campaigning.

According to the strategy, decision-making must be based on knowledge. This also requires strengthening the knowledge base in road safety. This will help further improve road safety in the future.

The strategy includes a number of measures to improve infrastructure safety, with particular emphasis on the correct speed limits and the infrastructure for walking and cycling.

The strategy also takes into account the potential benefits of technological development, such as automation, to road safety. It also includes various surveys related to legislative changes concerning topics such as a blood alcohol limit for cycling and micromobility. We also aim to promote the use of ignition interlock devices with legislation, for instance.

**Finland has been legislating to improve road safety for many years with a new Road Traffic Act coming into force in 2020. What in your view have been some of the most important pieces of legislation in terms of road safety, and why?**

Most of Finland's road transport legislation is based on international conventions. At the national level, our aim has been to create a clear and effective set of regulations that people in society want to follow. We put sharing information about responsibilities and obligations and encouraging safe traffic behaviour at the core. Adults in particular must set an example here.

Each road user must understand the role they play in traffic. The aim is that every road user considers others and always aims to behave in a way that does not risk anyone's road safety. Transport is a collaborative activity and following the same set of rules allows everyone to get home safely at the end of the day.

**In Finland, in-depth investigations are carried out on all fatal road collisions. How does Finland use these data to improve road safety?**

In Finland, investigation teams investigate collisions using a uniform method, and all fatal collisions are investigated. The investigation results form a continuously growing, cohesive set of research data

that lends itself to scientific research purposes. The data set is actively utilised in research, theses, planning and legislative development, for example.

The investigation of collisions has generated a lot of new information on issues affecting drivers' health and driving ability. The information has been used extensively for purposes such as the training of physicians and the preparation of driving health instructions.

The information collected on collisions is also widely used in official activities and in various training and campaign materials. For example, the information from the collision data set is used by the police in targeting and developing traffic surveillance, and by the Finnish Transport and Communications Agency (Traficom) in preparing vehicle regulations.

In addition, the Finnish Crash Data Institute provides an information service based on the data set for the media and authorities and also publishes reports and reviews that can promote better traffic safety in the future.

**Speed is a major factor in overall road safety performance. Speed limits are reduced to 80km/h on a large part of Finland's rural road network during the winter months, with noticeable results in terms of deaths prevented. The rest of the year, the speed limit increases to 100km/h. Finland is only one of few countries to have this limit on rural roads. What is Finland doing to reduce speeding on its roads, in particular on rural roads?**

Speeding is a serious problem and reducing it is a very important goal. We can influence it in various ways, such as through education and surveillance. In Finland, the police also carry out surveillance on low-traffic road sections to maximise the preventative effect of surveillance. Automated traffic monitoring is also used in some parts of the road network; the aim is to increase this in the coming years. The number of police officers will also be increased during this government's term.

It is important to ensure that road properties and speed limits are compatible. In addition to setting the correct speed limits, we must ensure that drivers follow them. We aim to influence this through many of the measures of the Traffic Safety Strategy.

**It is possible for 17 year olds to obtain a full driving licence in Finland under certain conditions. This is below the age recommended by the current EU driving licence directive. What action does Finland take to ensure the safety of young drivers and to ensure that the sometimes risky behaviour of young and novice drivers does not impact road safety negatively?**

Improving the safety of all road users is a priority and road safety is monitored closely. Unfortunately, young drivers are overrepresented in traffic accident statistics and some new drivers are responsible for various and also recurring traffic offences. This topic is influenced by various aspects, including upbringing, education and legislation.

Statistics do not portray the 17-year-old drivers as distinct from those who have turned 18 in terms of risk-taking. There are several measures in place to ensure that our young and novice drivers can take on safe traffic behaviour patterns. One such measure is the requirement to undergo additional driver education which is designed for those who are about to obtain their first driving licence. After the first driving licence is issued, novice drivers are subject to a two-year follow-up period during which the threshold for a driving disqualification is considerably lower. If a novice driver is banned from driving, their disqualification period is coupled with an additional requirement to complete a driving disqualification training where they reflect on their own high-risk driving behaviour. Besides driver education, young people nationwide receive road safety education as part of the basic education syllabus.

The age exemption permits for 17-year-olds for a driving licence have reduced riding mopeds, motorcycles and moped cars and naturally also the collisions involving these modes of transport. However, at the same time there has unfortunately been an increase in car collisions and traffic offences.

Studies show that 17-year-olds are more likely than older age groups to obtain a driving licence with a driving instructor permit. Persons who obtain a driving licence with a driving instructor permit usually practise driving considerably more than those attending a driving school. The high amount of practice that these young drivers get is reflected in the fact that 17-year-olds pass their driving test on the first attempt more often compared to older drivers. However, the greatest challenges lie in the behaviour of young drivers in traffic, and we aim to influence this through many

measures included in the Traffic Safety Strategy. We are constantly looking for new means to ensure this and making better use of the older ones. Education to change attitudes that support safe traffic and movement started at a young age at home, in day-care centres and in schools is extremely important.

Finland is closely monitoring how the safety situation is evolving. Regulation must improve traffic safety, even though we must, of course, pay attention to the opportunities for travel of different groups of people at the same time. Safety, including road safety, is a top priority in Finland, also in the National Transport System Plan that is currently being updated.

**How is Finland tackling the problem of drink-driving? What role does enforcement play?**

Finland has been carrying out long-term campaigns to reduce drink- and drug-driving. Since the 1970s, campaigns and police breathalyser checks have affected people's attitudes, and driving under the influence of alcohol is currently perceived very negatively in Finland.

However, alcohol and other intoxicants continue to be one of the biggest problems in traffic. The Traffic Safety Strategy introduced measures such as promoting the use of alcohol interlocks and determining the blood alcohol limit for micromobility. Moreover, under the strategy, we are making efforts to intervene in substance abuse as early as possible.

The important message is that intoxicants and traffic do not belong together under any circumstances. As we say in Finland: If you drink, you don't drive. Good behaviour and fitness are required in traffic.

**Can you give us an update on your alcohol interlock rehabilitation programme? How does it work and what are the latest results?**

49 people died and 400 people were injured on average in incidents involving drink-driving in the past three years. Almost a quarter of all deaths and injuries in road traffic collisions result from driving under the influence of alcohol. As driving under the influence is a significant risk factor and those caught while intoxicated are often reoffenders, alcohol interlocks have much greater potential for improving traffic safety compared to the current situation.

The relatively low alcohol interlock use rates are currently identified as a problem. This is affected by factors such as the costs of using the alcohol interlock



and the fact that driving disqualifications are currently relatively short. In Finland, a working group on driving bans is currently examining whether driving bans should be extended in cases of drink-driving and what impacts that would have on road safety and the use of alcohol interlocks. As a minister, I want to tighten the legislation. Driving licences should be suspended for a longer time, with a lower threshold, etc.

The alcohol interlock rehabilitation programme, or rather the use of alcohol interlocks in cases involving drink-driving, is based on the Alcohol Interlock Device Act, which was adopted in 2016. In Finland, the "alcohol interlock programme" is used in cases involving a driving ban on a person caught driving under the influence of alcohol, in which a person subject to the driving ban requests that the driving ban be replaced with an alcohol interlock-controlled right to drive. The duration of the alcohol interlock-controlled right to drive is always at least one year and is at least as long as the person's driving ban.

According to Traficom statistics, at the beginning of 2022, 1,099 Finns had been granted alcohol interlock-controlled right to drive as a result of driving while intoxicated. While there has been little increase in alcohol interlock use related to drink-driving, the use of alcohol interlocks on a health-related basis has increased. In addition, mandatory alcohol interlocks have been used in specific sectors, such as school transport, since 2011.

According to surveys conducted in Finland, more than 80% of respondents want more severe penalties for driving under the influence of alcohol. In fact, the better use of alcohol interlocks in improving traffic safety would require means such as extending driving bans (e.g. to at least one year to match the level in Sweden and Denmark) to make selecting alcohol interlock-controlled right to drive a more attractive alternative to driving bans.

Research shows that alcohol interlocks prevent reoffending among drink-drivers and may also have a more general effect on the driver's attitudes and alcohol use.

### How is Finland tackling the problem of drug-driving?

We use largely the same means to intervene in driving under the influence of narcotics and drugs as with driving under the influence of alcohol. In Finland, there is zero tolerance for drugs in traffic and the police carry

out traffic surveillance around the country. The police have the option to carry out rapid drug tests for drivers alongside breathalyser tests.

Driving under the influence of drugs is also very negatively viewed in Finland. We are also aiming to intervene in these problems as early as possible and with a preventive approach.

### Finland is one of only a few countries in the EU to include suicides in traffic in road safety statistics. How do these data contribute to improved road safety, and suicide prevention work as a whole?

In Finland, suicides are included in collision statistics. It is important to take various measures to reduce suicides in traffic. It has been observed that the underlying factors of suicides in traffic do not differ from those of suicides committed using other methods. As a result, cross-administrative suicide prevention, especially the effective and timely treatment of substance abuse problems and mental health disorders, plays a key role.

The Traffic Safety Strategy includes several measures to reduce the number of suicides in traffic. Healthcare plays an important role in this, including assessment of driver health. This Finnish tragedy should be distinguished from other road deaths. The statistics paint an inaccurate picture of traffic deaths as a whole.

### Finland took part in the European Commission's Baseline project to collect road safety indicators and will also take part in the follow-up project known as Trendline. How will road safety initiatives in Finland be linked to the data you collect? Do you have, or are you developing any targets linked to the KPIs for Finland?

In Finland, different parties have been collecting data on the use of safety equipment, the prevalence of driving under the influence and driving speeds for years. As a result, there were no major surprises in the results of the Baseline study.

To date, Finland has never set its own targets for these matters, and none are included in the current Traffic Safety Strategy. The setting of such targets should be assessed in the future. From the perspective of monitoring, clear measurable targets could encourage different parties to carry out more efficient traffic safety work.

### What are the key road safety challenges Finland faces today? How are you planning to address them in the short term?

Road deaths and serious injuries continue to decline too slowly. The lower these figures, the more difficult it will be to improve them.

In the future, more attention should be paid to reducing serious injuries. Approximately one third of those who have been seriously injured are cyclists. The most common type of crash is a cyclist fall that does not involve another party. It is difficult to influence such incidents. We can affect safety by modifying the traffic environment, but this is always a slow and expensive process. We have also assessed the possibility of setting a blood alcohol limit for cycling.

There is still a need for effective means to reduce derailments and head-on collisions, as these accidents have the highest number of all road traffic fatalities in Finland. The means include separating the driving directions and further softening the road environment. As it is well known that these events often also involve intoxicants and speeding as well as driving health-related issues, there is no easy way to reduce these incidents. While vehicle safety systems improve safety, their impact is slowly reflected in the most serious collisions which often involve old cars.

Thousands of collisions involving animals and game occur every year, resulting in serious material damage and personal injury. The key means to reduce collisions include game fencing, planning opening points, structural solutions that improve the visibility of the road area and speed limits. We are also constantly seeking new solutions through experiments.

New modes of transport also bring new challenges. To respond to them, we are tackling the challenges related to micromobility and are currently preparing a comprehensive package to improve the traffic safety and accessibility of micromobility.

The use of mobile phones while driving is a significant risk factor that must be addressed more strongly both through surveillance and sanctions. This is also concerned linked to people's attitudes. There is an increasing need for stirring campaigns on traffic safety in this hectic society full of stimuli.





# ANNEXES

COUNTRY	ISO CODE
Austria	AT
Belgium	BE
Bulgaria	BG
Croatia	HR
Cyprus	CY
Czechia	CZ
Denmark	DK
Estonia	EE
Finland	FI
France	FR
Germany	DE
Greece	EL
Hungary	HU
Ireland	IE
Italy	IT
Latvia	LV
Lithuania	LT
Luxembourg	LU
Malta	MT
The Netherlands	NL
Poland	PL
Portugal	PT
Romania	RO
Slovakia	SK
Slovenia	SI
Spain	ES
Sweden	SE
United Kingdom	UK
Great Britain	GB
Israel	IL
Norway	NO
Serbia	RS
Switzerland	CH

**Table 1 (Fig. 1 and 2) Road deaths and relative change in road deaths between 2022 and 2023 and 2019 and 2023**

	2019	2020	2021	2022	2023
AT	416	344	362	370	402
BE <sup>(1)</sup>	644	499	516	540	483
BG	628	463	561	531	526
CY	52	48	45	37	34
CZ	617	517	531	527	502
DE <sup>(1)</sup>	3,059	2,719	2,562	2,776	2,830
DK <sup>(1)</sup>	199	163	130	154	155
EE	52	59	55	51	59
ES <sup>(1)</sup>	1,755	1,370	1,533	1,746	1,779
FI <sup>(1)</sup>	211	223	225	196	182
FR <sup>(3)</sup>	3,244	2,541	2,944	3,267	3,167
EL <sup>(1)</sup>	688	584	624	654	621
HR	297	237	292	275	274
HU <sup>(1)</sup>	602	460	544	537	481
IE <sup>(1)</sup>	140	144	134	155	185
IT <sup>(1)</sup>	3,173	2,395	2,875	3,159	3,094
LU	22	26	24	36	26
LV <sup>(1)</sup>	132	139	147	113	142
LT	186	175	147	120	160
MT	16	12	9	26	16
NL	661	610	582	745	684
PL	2,909	2,491	2,245	1,896	1,893
PT <sup>(1)</sup>	626	509	532	591	600
RO <sup>(3)</sup>	1,864	1,646	1,779	1,634	1,545
SE	221	204	210	227	229
SI	102	80	114	85	82
SK	245	224	226	244	267
UK <sup>(2)</sup>	1,808	1,516	1,608	1,766	1,716
GB <sup>(1)</sup>	1,752	1,460	1,558	1,711	1,645
CH	187	227	200	241	236
IL	355	305	364	351	363
NO	108	93	80	116	110
RS	534	492	521	553	503
<b>EU 27</b>	<b>22,761</b>	<b>18,882</b>	<b>19,948</b>	<b>20,692</b>	<b>20,418</b>

	Fig.1 2022-2023
MT	-38.5%
LU	-27.8%
BE <sup>(1)</sup>	-10.6%
HU <sup>(1)</sup>	-10.4%
RS	-9.0%
NL	-8.2%
CY	-8.1%
FI <sup>(1)</sup>	-7.1%
RO <sup>(3)</sup>	-5.4%
NO	-5.2%
EL <sup>(1)</sup>	-5.0%
CZ	-4.7%
SI	-3.5%
FR	-3.1%
UK <sup>(2)</sup>	-2.8%
CH	-2.1%
IT <sup>(1)</sup>	-2.1%
BG	-0.9%
HR	-0.4%
PL	-0.2%
DK <sup>(1)</sup>	0.6%
SE	0.9%
PT <sup>(1)</sup>	1.5%
ES <sup>(1)</sup>	1.9%
DE <sup>(1)</sup>	1.9%
IL	3.4%
AT	8.6%
SK	9.4%
EE	15.7%
IE <sup>(1)</sup>	19.4%
LV <sup>(1)</sup>	25.7%
LT	33.3%
<b>EU 27</b>	<b>-1.3%</b>

	Fig.2 2019-2023
PL	-34.9%
CY	-34.6%
BE <sup>(1)</sup>	-25.0%
DK <sup>(1)</sup>	-22.1%
HU <sup>(1)</sup>	-20.1%
SI	-19.6%
CZ	-18.6%
RO <sup>(3)</sup>	-17.1%
BG	-16.2%
LT	-14.0%
FI <sup>(1)</sup>	-13.7%
EL <sup>(1)</sup>	-9.7%
HR	-7.7%
DE <sup>(1)</sup>	-7.5%
RS	-5.8%
UK <sup>(2)</sup>	-5.1%
PT <sup>(1)</sup>	-4.2%
AT	-3.4%
IT <sup>(1)</sup>	-2.5%
FR	-2.4%
MT	0.0%
ES <sup>(1)</sup>	1.4%
NO	1.9%
IL	2.3%
NL	3.5%
SE	3.6%
LV <sup>(1)</sup>	7.6%
SK	9.0%
EE	13.5%
LU	18.2%
CH	26.2%
IE <sup>(1)</sup>	32.1%
<b>EU27</b>	<b>-10.3%</b>

Source: national statistics provided by the PIN panellists for each country

<sup>(1)</sup> National provisional data used for 2023 as the final figures for 2023 were not yet available at the time of going to print

<sup>(2)</sup> 2022 estimate is based on GB and Northern Ireland provisional data

<sup>(3)</sup> CARE provisional data

<sup>(4)</sup> The average annual change is based on the entire time series of all the ten annual numbers of road deaths between 2013 and 2023, and estimates the average exponential trend. For more information, read the methodological note, <https://bit.ly/3VDIX7S>

**Table 2 (Fig. 3 and 10) Road deaths and relative change in road deaths between 2013 and 2023**

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
<b>AT</b>	455	430	479	432	414	409	416	344	362	370	402
<b>BE<sup>(1)</sup></b>	764	745	762	670	609	604	644	499	516	540	483
<b>BG</b>	601	655	708	708	682	611	628	463	561	531	526
<b>CY</b>	44	45	57	46	53	49	52	48	45	37	34
<b>CZ</b>	654	688	734	611	577	658	617	517	531	527	502
<b>DE<sup>(1)</sup></b>	3,340	3,368	3,459	3,206	3,177	3,275	3,059	2,719	2,562	2,776	2,830
<b>DK<sup>(1)</sup></b>	191	182	178	211	175	171	199	163	130	154	155
<b>EE</b>	81	78	67	71	48	67	52	59	55	51	59
<b>ES<sup>(1)</sup></b>	1,680	1,688	1,689	1,810	1,830	1,806	1,755	1,370	1,533	1,746	1,779
<b>FI<sup>(1)</sup></b>	258	229	270	258	238	239	211	223	225	196	182
<b>FR<sup>(3)</sup></b>	3,268	3,384	3,461	3,477	3,448	3,248	3,244	2,541	2,944	3,267	3,167
<b>EL<sup>(1)</sup></b>	879	795	793	824	731	700	688	584	624	654	621
<b>HR</b>	368	308	348	307	331	317	297	237	292	275	274
<b>HU<sup>(1)</sup></b>	591	626	644	607	625	633	602	460	544	537	481
<b>IE<sup>(1)</sup></b>	188	192	162	182	154	134	140	144	134	155	185
<b>IT<sup>(1)</sup></b>	3,401	3,381	3,428	3,283	3,378	3,334	3,173	2,395	2,875	3,159	3,094
<b>LU</b>	45	35	36	32	25	36	22	26	24	36	26
<b>LV<sup>(1)</sup></b>	179	212	188	158	136	148	132	139	147	113	142
<b>LT</b>	258	267	242	192	192	173	186	175	147	120	160
<b>MT</b>	18	10	11	22	19	18	16	12	9	26	16
<b>NL</b>	570	570	620	629	613	678	661	610	582	745	684
<b>PL</b>	3,357	3,202	2,938	3,026	2,831	2,862	2,909	2,491	2,245	1,896	1,893
<b>PT<sup>(1)</sup></b>	637	638	593	563	602	675	626	509	532	591	600
<b>RO<sup>(3)</sup></b>	1,861	1,818	1,893	1,913	1,951	1,867	1,864	1,646	1,779	1,634	1,545
<b>SE</b>	260	270	259	270	253	324	221	204	210	227	229
<b>SI</b>	125	108	120	130	104	91	102	80	114	85	82
<b>SK</b>	223	259	274	242	250	229	245	224	226	244	267
<b>UK<sup>(2)</sup></b>	1,770	1,854	1,804	1,860	1,856	1,839	1,808	1,516	1,608	1,766	1,716
<b>GB<sup>(1)</sup></b>	1,713	1,775	1,730	1,792	1,793	1,784	1,752	1,460	1,558	1,711	1,645
<b>CH</b>	269	243	253	216	230	233	187	227	200	241	236
<b>IL</b>	309	319	356	377	364	316	355	305	364	351	363
<b>NO</b>	187	147	117	135	106	108	108	93	80	116	110
<b>RS</b>	650	536	599	607	579	548	534	492	521	553	503
<b>EU 27</b>	<b>24,296</b>	<b>24,183</b>	<b>24,413</b>	<b>23,880</b>	<b>23,446</b>	<b>23,356</b>	<b>22,761</b>	<b>18,882</b>	<b>19,948</b>	<b>20,692</b>	<b>20,418</b>

Source: national statistics provided by the PIN panellists for each country

<sup>(1)</sup> National provisional data used for 2023 as the final figures for 2023 were not yet available at the time of going to print

<sup>(2)</sup> 2022 estimate is based on GB and Northern Ireland provisional data

<sup>(3)</sup> CARE provisional data

<sup>(4)</sup> The average annual change is based on the entire time series of all the ten annual numbers of road deaths between 2013 and 2023, and estimates the average exponential trend. For more information, read the methodological note, <https://bit.ly/3VDIX75>

Fig.3 2013-2023	
PL	-43.6%
LU	-42.2%
NO	-41.2%
LT	-38.0%
BE <sup>(1)</sup>	-36.8%
SI	-34.4%
FI <sup>(1)</sup>	-29.5%
EL <sup>(1)</sup>	-29.4%
EE	-27.2%
HR	-25.5%
CZ	-23.2%
CY	-22.7%
RS	-22.6%
LV <sup>(1)</sup>	-20.7%
DK <sup>(1)</sup>	-18.8%
HU <sup>(1)</sup>	-18.6%
RO <sup>(3)</sup>	-17.0%
DE <sup>(1)</sup>	-15.3%
BG	-12.5%
CH	-12.3%
SE	-11.9%
AT	-11.6%
MT	-11.1%
IT <sup>(1)</sup>	-9.0%
PT <sup>(1)</sup>	-5.8%
UK <sup>(2)</sup>	-3.1%
FR	-3.1%
IE <sup>(1)</sup>	-1.6%
ES <sup>(1)</sup>	5.9%
IL	17.5%
SK	19.7%
NL	20.0%
<b>EU27</b>	<b>-16.0%</b>

Fig. 10 Annual average change in the number of road deaths 2013-2023 <sup>(4)</sup>		
PL	-5.4%	
NO	-4.8%	
BE	-4.7%	2013-2022
LV	-4.2%	
LU	-3.9%	
SI	-3.8%	
EE	-3.7%	
EL	-3.6%	
CZ	-3.2%	
DK	-2.9%	2013-2022
BG	-2.8%	
HR	-2.8%	
MT	-2.8%	2013-2021
FI	-2.6%	2014-2022
DE	-2.6%	
HU	-2.5%	
CY	-2.4%	
SE	-2.4%	
AT	-2.3%	
IT	-2.2%	2013-2022
RS	-1.9%	
PT	-1.4%	2013-2022
CH	-1.4%	
FR	-1.3%	
GB	-1.0%	
ES	-0.9%	2013-2022
RO	-0.9%	2013-2021
SK	-0.1%	
IL	0.7%	
NL	1.7%	2013-2022
<b>EU22</b>	<b>-2.4%</b>	
IE	Excluded from Fig.10	
LT	Excluded from Fig.10	
UK	Excluded from Fig.10	

**Table 3 (Fig. 6) Road deaths per million inhabitants in 2023 and 2013**

	2023				2013		
	Road deaths	Inhabitants	Deaths per mln inhabitants		Road deaths	Inhabitants	Deaths per mln inhabitants
NO	110	5,488,984	20	NO	187	5,051,275	37
SE	229	10,521,556	22	SE	260	9,555,893	27
UK <sup>(1)</sup>	1,716	68,400,000	25	UK <sup>(1)</sup>	1,770	64,105,654	28
DK <sup>(1)</sup>	155	5,932,654	26	DK <sup>(1)</sup>	191	5,602,628	34
CH	236	8,815,385	27	CH	269	8,039,060	33
MT	16	542,051	30	MT	18	422,509	43
FI <sup>(1)</sup>	182	5,563,970	33	FI <sup>(1)</sup>	258	5,426,674	48
DE <sup>(1)</sup>	2,830	84,358,845	34	DE <sup>(1)</sup>	3,340	80,523,746	41
IE <sup>(1)</sup>	185	5,271,395	35	IE <sup>(1)</sup>	188	4,609,779	41
IL	363	9,842,000	37	IL	309	8,134,464	38
CY	34	920,701	37	CY	44	865,878	51
ES <sup>(1)</sup>	1,779	48,085,361	37	ES <sup>(1)</sup>	1,680	46,727,890	36
NL	684	17,811,291	38	NL	570	16,779,575	34
SI	82	2,116,972	39	SI	125	2,058,821	61
LU	26	660,809	39	LU	45	537,039	84
BE <sup>(1)</sup>	483	11,742,796	41	BE <sup>(1)</sup>	764	11,137,974	69
EE	59	1,365,884	43	EE	81	1,320,174	61
AT	402	9,104,772	44	AT	455	8,451,860	54
CZ	502	10,827,529	46	CZ	654	10,516,125	62
FR <sup>(2)</sup>	3,167	65,925,961	48	FR <sup>(2)</sup>	3,268	63,697,865	51
SK	267	5,428,792	50	SK	223	5,410,836	22
HU <sup>(1)</sup>	481	9,599,744	50	HU <sup>(1)</sup>	591	9,908,798	60
PL	1,893	36,753,736	52	PL	3,357	38,062,535	88
IT <sup>(1)</sup>	3,094	58,997,201	52	IT <sup>(1)</sup>	3,401	59,685,227	57
LT <sup>(1)</sup>	160	2,857,279	56	LT <sup>(1)</sup>	258	2,971,905	65
EL	621	10,413,982	60	EL	879	11,003,615	80
PT <sup>(3)</sup>	600	9,974,165	60	PT <sup>(3)</sup>	637	9,937,008	64
HR	274	3,850,894	60	HR	368	4,262,140	86
LV <sup>(1)</sup>	142	1,883,008	75	LV <sup>(1)</sup>	179	2,023,825	88
RS	503	6,641,197	76	RS	650	7,181,505	91
RO <sup>(4)</sup>	1,545	19,054,548	81	RO <sup>(4)</sup>	1,861	20,020,074	93
BG	526	6,447,710	82	BG	601	7,284,552	83
<b>EU 27</b>	<b>20,420</b>	<b>448,724,279</b>	<b>46</b>	<b>EU 27</b>	<b>24,296</b>	<b>439,355,226</b>	<b>55</b>

Source: national road death statistics provided by the PIN panellists for each country, completed with Eurostat for population data

<sup>(1)</sup> National provisional estimates used for 2023, as the final figures for 2023 were not yet available when this report went to print

<sup>(2)</sup> FR: continental population data

<sup>(3)</sup> PT: continental population estimate. 2023 road deaths and continental population data provided by the National Road Safety Authority (ANSR)

<sup>(4)</sup> CARE provisional data



**Table 4 (Fig. 7) Road deaths per billion vehicle-kilometres over three recent years**

	Road deaths (3-year average)	Vehicle-km in million (3-year average) <sup>(1)</sup>	Deaths per billion vh-km (3-year average)	Time period covered
NO	102	45,432	2.2	motorcycles not included
SE	222	81,328	2.7	
DK	146	51,733	2.8	
IE	144	41,906	3.4	2020-2022
CH	226	64,624	3.5	
SK	246	67,896	3.6	
DE	2,723	707,667	3.8	
FI	201	47,918	4.2	
SI	94	20,420	4.6	
AT	359	75,640	4.7	2020-2022
EE	55	11,505	4.8	2020-2022
FR	2,917	579,445	5.0	2020-2022
NL	646	124,036	5.2	motorcycles not included, 2020-2022
IL	340	61,674	5.5	2020-2022
IT	3,043	435,099	7.0	
PT	574	73,364	7.8	
CZ	525	54,947	9.6	2020-2022
LV	133	12,871	10.3	2020-2022
HR	280	26,983	10.4	
PL	2,548	242,292	10.5	2020-2022
LT	142	13,090	10.9	
HU	535	44,388	12.1	only main roads, 2020-2022
<b>EU19</b>	<b>15,219</b>	<b>2,652,680</b>	<b>5.7</b>	
BE			n/a	
BG			n/a	
CY			n/a	
EL			n/a	
LU			n/a	
MT			n/a	
RO			n/a	
RS			n/a	
UK			n/a	

EU20: EU27 excluding BE, BG, CY, EL, ES, LU, MT, and RO due to lack of data on vehicle distance travelled

<sup>(1)</sup> Data provided by PIN panellists. Member States are using different methods for estimating the numbers of distance travelled

**Table 5 (Fig. 8, 9, 10)**

Number of seriously injured according to national definition (see table 6 for definition) and MAIS3+, relative change in serious injuries between 2013-2023 and annual average relative change over the period 2013-2023.

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
AT*	7,344	7,434	7,486	7,566	7,664	7,631	7,384	6,650	6,945	7,258	7,191
AT MAIS3+	1,397	1,402	1,303	1,380	1,238	1,279	1,211	988	1,078	1,204	
BE*	4,581	4,484	4,181	4,095	3,762	3,637	3,605	2,978	3,098	3,368	
BE MAIS3+	4,132	3,965	3,660	3,691	3,733	3,549	3,736	3,240	3,402		
BG	2,303	2,174	2,295	2,503	1,943	1,988	1,937	1,556	1,458	1,766	1,794
BG MAIS3+	2,034	2,175	2,295	2,503	1,943	1,988	1,937	1,556	1,458	1,766	1,794
CY*	407	467	377	406	388	348	340	211	252	253	232
CY MAIS3+		83			92	85					
CZ	2,721	2,714	2,487	2,530	2,286	2,395	2,061	1,761	1,580	1,682	1,711
CZ MAIS3+											
DE*	64,045	67,709	67,706	67,426	66,513	67,967	65,244	57,983	54,826	57,306	52,465
DE MAIS3+		15,392	15,442	16,337	15,892	15,265	15,311	13,238	12,244		
DK	1,891	1,798	1,780	1,797	1,756	1,862	1,822	1,716	1,639	1,718	
DK MAIS3+											
EE*	501	455	407	424	429	420	356	346	352	404	430
EE MAIS3+											
ES	10,086	9,574	9,495	9,755	9,546	8,935	8,613	6,681	7,784	8,052	
ES MAIS3+	6,613	6,343	6,955			6,059	6,162	4,793	5,654		
FI	n/a	519	477	460	409	485	390	408	368	334	n/a
FI MAIS3+		519	477	460	409	485	390	408	368	334	n/a
FR*	25,966	26,635	26,595	27,187	27,732	n/a	n/a	n/a	n/a	n/a	n/a
FR MAIS3+	15,841	16,496	16,355	16,773	16,887	16,104	16,248	13,337	15,944	15,956	15,936
EL*	1,212	1,016	999	879	706	727	652	518	610	664	657
EL MAIS3+											
HR	2,831	2,675	2,822	2,746	2,776	2,731	2,492	2,302	2,610	2,910	3,102
HR MAIS3+											
HU	5,369	5,331	5,575	5,541	5,630	5,559	5,482	4,655	4,596	5,041	4,799
HU MAIS3+											
IE <sup>(1)</sup> *	508	759	827	965	1,053	1,359	1,506	1,218	1,362	1,640	
IE MAIS3+		364	341	386	444	475	523	406	483	567	
IT	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
IT MAIS3+	12,899	14,943	15,901	17,324	17,309	18,614	17,600	14,102	15,990	16,875	
LU*	316	245	319	249	256	273	248	217	267	267	347
LU MAIS3+			69	69	43	55*	n/a	n/a	n/a		
LV*	452	434	479	525	496	542	461	491	449	428	383
LV MAIS3+											
LT	1,481	1,437	724	655	368	165	308	376	392	476	490
LT MAIS3+	-	-	147	71	131	163	110	86	81	74	61
MT	265	292	306	294	304	317	305	242	339		
MT MAIS3+											
NL	12,100	14,100	14,700	15,300	14,800	15,800	16,000	14,800	15,600	19,400	
NL - MAIS3+	5,300	5,800	6,000	6,400	6,500	6,800	6,900	6,500	6,800	8,300	
PL	11,672	11,696	11,200	12,077	11,103	10,941	10,633	8,805	8,276	7,541	7,594
PL MAIS3+	1,859	2,263	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
PT*	1,946	2,010	2,148	1,999	2,117	1,995	2,168	1,723	1,987	2,124	
PT MAIS3+	2,074	2,055	2,171	2,199	2,301	2,276	2,281	2,201	2,258	2,288	
RO	8,156	8,122	9,057	8,285	8,181	8,144	8,125	5,484	3,787		
RO MAIS3+											
SE	4,379	4,548	3,611	3,846	3,773	3,411	3,319	2,959	3,610	4,475	4,286
SE MAIS3+	950	1,035	702	795	756	676	642	555	835	1,135	1,070
SI	708	826	926	850	851	821	814	678	784	862	829
SI MAIS3+		213									
SK	1,086	1,098	1,121	1,057	1,127	1,272	1,050	914	869	882	894
SK MAIS3+											
UK*											
UK MAIS3+	5,236	5,741	6,092	6,547							
GB	31,788	33,555	32,132	30,899	29,766	30,204	29,122	22,627	25,739	28,100	
GB MAIS3+	5,174	5,667	6,012	6,479							
CH*	4,129	4,043	3,830	3,785	3,654	3,873	3,639	3,793	3,933	4,002	4,096
CH MAIS3+	3,204	2,899	2,887	2,929	3,127	3,732	3,086	3,207	3,385		
IL*											
IL MAIS3+	2,086	2,031	2,190	2,474	2,366	2,181	2,409	2,067	2,449	2,595	2,581
NO	712	683	693	656	665	602	565	627	569	578	568
NO MAIS3+	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
RS	3,422	3,275	3,448	3,362	3,514	3,338	3,322	2,953	3,347	3,292	3,391
RS MAIS3+											
EU24	165,440	173,038	173,153	176,422	172,831	174,975	169,439	146,187	150,407	159,786	149,061

\* Similar national serious injury definition. EU24: EU27 excluding LT, and IE due to inconsistent data trend and RO due to lack of updated data. EU24 average is an ETSC estimate as whole time series for serious injury data are not available in all 24 EU countries that collect data

<sup>(1)</sup> IE: serious injury data collection changed in 2014

<sup>(2)</sup> The average annual change is based on the entire time series of all the ten annual numbers of serious injuries between 2013 and 2023, and estimates the average exponential trend. For more information, read the methodological note, PIN Flash 6: <https://bit.ly/2LVUty>

	Fig. 8 2013- 2023	Time period
RO	-53.6%	2013-2021
EL	-45.8%	
CY	-43.0%	
CZ	-37.1%	
FI	-35.6%	2014-2022
PL	-34.9%	
BE	-26.5%	2013-2022
BG	-22.1%	
NO	-20.2%	
ES	-20.2%	2013-2022
DE	-18.1%	
SK	-17.7%	2013-2022
LV	-15.3%	
EE	-14.2%	
GB	-11.9%	
HU	-10.6%	2013-2022
DK	-9.1%	2013-2022
SE	-2.1%	
AT	-2.1%	
RS	-0.9%	
CH	-0.8%	
FR	0.6%	
PT	9.1%	2013-2022
HR	9.6%	
LU	9.8%	
SI	17.1%	
IL	23.7%	
MT	27.9%	2013-2021
IT	30.8%	2013-2022
NL	60.3%	2013-2022

**EU24** -9.5%

	Fig.10 Annual average change in the number of serious injuries 2013-2023 <sup>(2)</sup>	
RO	-7.2%	2013-2021
CY	-6.9%	
EL	-6.5%	
CZ	-5.7%	
PL	-4.9%	
FI	-4.6%	2014-2022
BE	-4.4%	2013-2022
BG	-3.9%	
ES	-3.4%	2013-2022
SK	-2.7%	
GB	-2.4%	
NO	-2.4%	
DE	-2.4%	
EE	-2.0%	
HU	-1.6%	
LV	-1.2%	
DK	-1.0%	2013-2022
SE	-0.7%	
AT	-0.7%	
FR	-0.6%	
RS	-0.4%	
PT	-0.1%	2013-2022
SI	0.0%	
LU	0.0%	
CH	0.0%	
HR	0.1%	
MT	0.8%	2012-2021
IT	1.5%	2013-2022
IL	1.9%	
NL	3.2%	2013-2022

**EU22** -1.5%

IE	Excluded from Fig.10
LT	Excluded from Fig.10
UK	Excluded from Fig.10

	Fig. 9*		
	Serious injuries (national def) per death	MAIS3+ per death	Time period
AT	18.9	3.0	
BE	6.1	6.3	2020-2022
BG	3.1	3.1	
CY	6.4		
CZ	3.2		
DE	20.2	8.8	
DK	11.3		2020-2022
EE	7.2		
ES	4.8	3.6	2020-2022
FI	1.7	1.7	2020-2022
FR	5.1	5.1	
EL	1.0		
HR	10.3		
HU	9.2		
IE	10.1	3.4	2020-2022
IT	5.6	5.6	2020-2022
LU	10.2		
LV	3.4		2020-2022
LT	3.2	0.5	
MT	18.9		2019-2021
NL	25.7	11.2	2020-2022
PL	3.9		
PT	3.6	4.1	2020-2022
RO	1.8		2019-2021
SE	18.6	4.6	
SI	8.8		
SK	3.6		
GB	15.8		
CH	17.8	15.8	
IL	7.1	7.1	
NO	5.6		
RS	6.4		2020-2022

\*Numbers between countries are not comparable

**Table 6. National definitions of a seriously injured person in a road collision in Police records corresponding to the data in Table 4.**

<b>AT</b>	Whether an injury is severe or slight is determined by §84 of the Austrian criminal code. A severe injury is one that causes a health problem or occupational disability longer than 24 days, or one that "causes personal difficulty". Police records.
<b>BE</b>	Hospitalised more than 24 hours. But in practice no communication between police and hospitals so in most cases allocation is made by the police without feedback from the hospitals. (Police records)
<b>BG</b>	The level of "body damage" is defined in the Penalty code. There are 3 – light, medium and high levels of body damage. Prior to introducing MAIS in the Police records the first level is "light injured", the second and third is "heavy injured". The medium and high level corresponded to MAIS3+ levels, as it is defined in the CADaS Glossary.
<b>CY</b>	Hospitalised for at least 24 hours. Police records. Since 2017, serious injuries based on MAIS3+ is also estimated by the Ministry of Health (please also see note on table 5).
<b>CZ</b>	Determined by the treating doctor, if serious health harm (specified approximately along the types by the law) occurs. Police records.
<b>DE</b>	Hospitalised for at least 24 hours. Police records.
<b>DK</b>	All injuries except "slight". Police records.
<b>EE</b>	Hospitalised for at least 24 hours. Hospital data is used to find out how long the person (involved in an accident according to the police data) was hospitalised.
<b>ES</b>	Hospitalised for at least 24 hours. Police records.
<b>FI</b>	Serious injury in official statistics is defined as MAIS3+ (AAAM, Association for the Advancement of Automotive Medicine). The number of seriously injured MAIS3+ is formed by combining the official road accident participant statistics maintained by Statistics Finland and the Hospital Discharge Register (HILMO), using personal identity numbers as the link. ICD-10 codes from hospital data are converted to MAIS.
<b>FR</b>	"Until 2004: hospitalised for at least 6 days. From 2005: hospitalised for at least 24 hours. Police records. People injured are asked to go to the police to fill in information about the collision, in particular if they spent at least 24 hours as in-patient. Since 2017, we've stop using hospitalised injuries from police data due to a reduction in relevance."
<b>EL</b>	Injury and injury severity are estimated by police officers. It is presumed that all persons who spent at least one night at the hospital are recorded as seriously injured persons. Police records.
<b>HR</b>	"ICD-International Classification of Diseases - used by medical staff exclusively, after admission to the hospital"
<b>HU</b>	Serious injuries include injuries, fractures, bruises, internal injuries, severe cuts and destruction, general shock requiring medical treatment, or any injury requiring hospital care, which usually heals beyond 8 days.
<b>IE</b>	Hospitalised for at least 24 hours as an in-patient, or any of the following injuries whether or not detained in hospital: fractures, concussion, internal injuries, crushing, severe cuts and lacerations, several general shock requiring medical treatment.
<b>IT</b>	Separate statistics on seriously and slightly injuries are n/a in the Road accidents dataset. Despite that, Italy calculated the number of serious injured according to EU recommendations (MAIS3+) and using data based on hospitals discharge records.
<b>LU</b>	Hospitalised for at least 24 hours as in-patient. Police records.
<b>LV</b>	From 2004 till 2021: hospitalised more than 24 hours as in-patient. Police records. From 2022: MAIS3+
<b>LT</b>	Seriously injured person loses more than 30 % of his/her working capacity or/and his or her body is being incurably mutilated.
<b>MT</b>	An injury accident is classified as 'Serious' injury (referred to in Malta accident statistics as 'Grievous' injury) if the person does not recover his/her previous health condition with 30 days. Police records.
<b>NL</b>	"Injured in the police reporting -as provided to CARE- is any person having sustained injury due to a road traffic crash with at least one moving vehicle involved on a public road in the Netherlands. The injury varies from: - Slight (treated on the scene by local help/bystanders/first aid assistant or ambulance staff without transport to hospital/Emergency Unit, possible treatment later by GP); - A&E (treated by ambulance staff, medical team with transport to hospital/Emergency Unit or brought to the hospital by other means, without stay); - Hospitalised (stabilised by ambulance staff, medical team and transported to hospital/Emergency Unit or brought to the hospital by other means and admitted for at least one night). From police data a more or less stable series can be found by adding Hospitalised + A&E treated, as since 2014 these groups are no longer possible to distinguish. Note that this series is underreported by a factor 3-20, depending on the mode of transport and involvement of a motor vehicle."
<b>PL</b>	"Seriously injured – a person who has suffered injuries, in the form of: a) blindness, loss of hearing, loss of speech, ability to procreate, other severe disability, severe incurable disease or long-term life-threatening illness, permanent mental illness, complete substantial permanent inability to work in the occupation or permanent, significant body disfigurement, b) other injuries causing disturbance of the functioning of a bodily organ or health disorder lasting longer than 7 days. Police records."

<b>PT</b>	Hospitalised for at least 24 hours. Police records.
<b>RO</b>	From 2021 we use MAIS3+ with conversion approved by DG-MOVE because Ro Hospitals used ICD 10 Australian version.
<b>SE</b>	The definition of seriously injured was updated in 2007. A serious injury is now defined as a health loss following a traffic injury reflecting that a person does not recover the previous health condition within a reasonable amount of time. This series is used in the national annual follow up and there is a goal for 2030 (-25 % since 2020). Hospital records.
<b>SI</b>	Any injured persons who were involved in a road traffic accident and sustained injuries due to which their lives were in danger or due to which their health was temporarily or permanently damaged or due to which they were temporarily unable to perform any work or their ability to work was permanently reduced (Penal Code of the Republic of Slovenia). Police records.
<b>SK</b>	" Serious bodily harm or serious disease, which is a) mutilation, b) loss or substantial impairment of work capacity, c) paralysis of a limb, d) loss or substantial impairment of the function of a sensory organ, e) damage to an important organ, f) disfigurement, g) inducing abortion or death of a foetus, h) agonising suffering, or i) health impairment of longer duration. health impairment of longer duration is an impairment, which objectively requires treatment and possibly involves work incapacity of not less than forty-two calendar days, during which it seriously affects the habitual way of life of the injured party."
<b>UK</b>	Hospitalised for at least 24 hours or any of the following injuries whether or not they are detained in hospital: fractures, concussion, internal injuries, crushing, burns (excluding friction burns), severe cuts and lacerations, severe general shock. Since 2016, changes in severity reporting systems for a large number of police forces mean that serious injury figures as reported to the police are not comparable with earlier years. These systems use a list of injuries which are automatically mapped to severity, rather than relying on the judgment of the police officer.
<b>CH</b>	Up to 2014: Hospitalised for at least 24 hours or if the injury prevented the person from doing its daily activity for 24 hours. Since 2015: Hospitalised for at least 24 hours. Police records. Further comments: In Switzerland, injury severity is still assessed by means of a simple definition by the police force present at the scene. Nothing is known of the type and long-term outcome of injuries. In order to improve the assessment of injury severity a first step was taken: since January 2015 the definition of injury severity was further specified and the police corps were trained. Also a new category "life-threatening injury" was introduced. For a further standardization the severity scale was linked to the NACA-Codes, used by all emergency services in Switzerland
<b>IL</b>	" 1965-2012: A person injured in a road crash and hospitalized for a period of 24 hours or more, not for observation only. 2013 onwards: Police data is linked with the hospital data and any casualty found in both sources had their severity of injury defined by MAIS. If the casualty was not found in the hospital data, their severity of injury was defined by the police. Seriously injured is defined by MAIS3+ or hospitalized for a period of 24 hours or more, not for observation only."
<b>NO</b>	Very serious injury: Any injury that is life-threatening or results in permanent impairment. Serious injury: Any injury from a list of specific injuries; these would normally require admission to hospital as an in-patient. Police records.
<b>RS</b>	Using of the ICD-International Classification of Diseases. Categorization of an injury as a "serious injury" is made on the basis of expert assessment given by doctors during admission to hospital, during hospitalization or after the hospitalization. The Republic of Serbia has not yet adopted a definition for serious injury. Police records.

**Table 7. Countries' progress in collecting data on seriously injured based on MAIS3+**

<b>AT</b>	"The KFV carried out a feasibility study on MAIS3+ assessment on behalf of the (then) Austrian Transport Ministry (bmvit) in 2014 and 2015. The study covered two methods to estimate the number of serious road injuries: a) application of a (hospital data based) correction factor to the police reported number of serious injuries, and b) use hospital data alone to arrive at an estimate for serious injuries. The latter method was selected for further use. In late 2015, the number of MAIS3+ injuries was estimated for the first time for the year 2014 (using the AAAM conversion table) and has been continued for all years thereafter. Time series are now available starting 2010."
<b>BE</b>	MAIS3+ data is currently available for 2005-2021 and new data will be available every year. We are able to provide breakdowns according to age, road user type, gender, month, year, accident type. We use method one (correction factors applied to police data) and method two (use of hospital data) that are proposed by the European Commission.
<b>BG</b>	The only source is Police records.
<b>CY</b>	We have supplied to the Commission the data based on MAIS3+ for 2017 and 2018. For 2019 up to 2023, the numbers will be calculated in the coming few months and will be provided to the European Commission.
<b>CZ</b>	Negotiations between the Ministry of Interior and the Ministry of Health under way, implementation of MAIS3+ maybe in a near future?
<b>DE</b>	An MAIS3+ injured persons estimation based on GIDAS data, data from the German Trauma Register and data from the official accident statistics is being calculated by Bast.
<b>DK</b>	No systematic linkage between police and hospital data. Denmark is working on a process to convert ICD diagnose codes into AIS and MAIS.
<b>EE</b>	ICD-10 diagnose info exists, technologically ready to link accident data with health registry data. Need to change legislation and due to that issue we can't start linking process. In 2019 we tried to test EU proposed ICD - AIS conversion tool. The result we got from the Health Information System was very doubtful. Further work depends on the initial data quality and convention tool (AAAM) updates. Legislative changes are drafted.
<b>ES</b>	Data available from 2010. Since 2011 MAIS3+ is published in official reports. In a near future Spain will add MAIS3+ to the current definition of seriously injured.
<b>FI</b>	MAIS3+ (based on AAAM converter tool) is used in official data (from 2014 onwards). A pilot study was made in 2014 where the number of seriously injured MAIS3+ was formed by combining the official road accident participant statistics maintained by Statistics Finland and the Hospital Discharge Register (HILMO), using personal identity numbers as the link. Number of serious injuries (MAIS3+) in road traffic were estimated for the years 2010-2011.
<b>FR</b>	"Linking between police and health data is done in the Rhone county and then used by the Guastave Eiffel University to build an estimate comparing the structure of Rhone and national accident data. Using a similar but simpler method, a first estimate of the number of serious injuries (MAIS3+) is produced at the same time as the other accident statistics, while waiting for the definitive estimate by the Gustave Eiffel University."
<b>EL</b>	Hospitals do not systematically collect data on the injury severity of road casualties.
<b>HR</b>	Link between police and hospital is based on the law. Only ICD based number is available.
<b>HU</b>	The real possibility can only be the transformation of ICD codes to AIS ones thus Hungary started modification of the legislation in 19.12.2016. The current data architecture does not provide direct linkage between police and hospital data. The National Healthcare Services Center started to upgrade the information system but the required time for the development of the necessary IT systems is not known yet.
<b>IE</b>	In 2022 Ireland commenced a project to study hospital data and apply the MAIS3+ serious injury definition proposed by the EC, following the Safety Cube methodology and additional procedures needed due to the nature of Irish data. This project aligns with action 172 of the Road Safety Strategy: Develop a method to identify and enumerate serious injuries using a medical definition, such as MAIS3+, and report on same as part of the dissemination of trend data, updates, and reporting on serious injuries. We have reported to the EC MAIS3+ numbers for the period 2014-2022. Data for 2023 will be available in Q4 2024. We are currently working on a series of reports on serious injuries using hospital data by road user group. The first published report of the series is focused on cyclists. The full cyclist report, an infographic with key results, and a methodology report can be found at <a href="https://www.rsa.ie/road-safety/statistics/road-traffic-collision-data">https://www.rsa.ie/road-safety/statistics/road-traffic-collision-data</a> .
<b>IT</b>	The current data architecture does not provide direct linkage between police and hospital data. MAIS3+ has been adopted for coding the level of injury and calculated on the basis of data sources such as the hospital discharge register. An estimate of the number of seriously injured has been calculated since year 2012 according to the conversion tables made available by EC.
<b>LU</b>	MAIS3+ will be used in the near future.
<b>LV</b>	MAIS3+ introduced by law in August 2021. Ministry of Health and Ministry of the Interior reported that fully introduced in August 2022
<b>LT</b>	MAIS3+ data already available since 2014, but not all accident fields (MAIS3+) are filled - missing information.
<b>MT</b>	MAIS3+ conversion process from ICD to MAIS3+ is still ongoing. Progress stalled due to a low rate of positive matches in converting data using conversion tables provided by the EC. The EC has recently communicated that AAAM have been contracted in 2022 to provide support to MS for this conversion. As Malta has encountered difficulties on MAIS3+ conversion, this support is welcomed. We aim to resume conversion of MAIS3+ data this year in collaboration with the Ministry of Health.
<b>NL</b>	Data on MAIS3+ have been recalculated for AIS@2005 instead of AIS@1990. Also MAIS2 was recalculated. Nationally now also MAIS3+ is defined as seriously injured, where as previously MAIS=2 was also included.

<b>PL</b>	The work is coordinated by the National Road Safety Council, National Institute of Public Health and Motor Transport Institute. Poland transfer data from 2013 and 2014 according to the recommendations of the CARE group (DG MOVE). In recent years, work on MAIS3+ in Poland has been stopped. The method proposed by DG MOVE (conversion of ICD-10 scale on the MAIS3+ scale) in our opinion has errors and leads to incorrect results. Unfortunately, due to a lack of financing, Poland could not launch a national project to develop a methodology for assessing the severity of injuries of road accident victims according to the MAIS3+ scale.
<b>PT</b>	"A methodology was developed in 2015 to estimate the number of MAIS3+ serious injuries, using the national hospital discharge database. The Health Ministry applies the EC's AAAM converter to the ICD9-CM codes to calculate the MAIS score. This method is being improved, as Health Ministry is currently using ICD-10-CM/PCS injury codes, since mid-2016. Also, recommendations from SafetyCube D7.1, on external causes codes for road accident victims are being analysed. Under the new Road Safety Strategy (2017-2020), a new working group will establish a procedure to collect in the police data the required information while preserving the victim's privacy. A protocol for agreed procedure implementation is being prepared for signature by relevant parties."
<b>RO</b>	From 2021 we use MAIS3+ with conversion approved by DG-MOVE because Ro Hospitals used ICD 10 Australian version.
<b>SE</b>	Data already available since 2007.
<b>SI</b>	We have made experimental linking between police and hospital data. MAIS3+ data are incomplete and not ready for publication and still under discussion.
<b>SK</b>	Under discussion.
<b>UK</b>	MAIS3+ serious injuries is done on an ad hoc basis, and is therefore not published regularly. Figures have been updated to 2016 for UK MAIS3+ figures and are published in table RAS55050: <a href="https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/555730/ras55050.ods">https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/555730/ras55050.ods</a>
<b>CH</b>	Linking of health and police data has started in 2014. This allows to code the recommended maximum AIS score based on ICD-10.
<b>IL</b>	Since 2013 police data is linked with hospital data. Any casualty found in both sources, their injury severity is defined by MAIS. If the casualty was not found in the hospital data, their injury severity is defined by the police. Seriously injured is defined by MAIS3+ or hospitalized for a period of 24 hours or more, not for observation only.
<b>NO</b>	Under consideration.
<b>RS</b>	Road Traffic Safety Agency has begun activities to introduce the MAIS3+ scale to record serious injuries. During 2017, an analysis of the possibilities for the most efficient introduction of the MAIS3+ scale was performed. via EU for Improving Road Safety in Serbia Project. Road Traffic Safety Agency intends to continue activities on introduction MAIS3+ definition of serious injuries in road traffic accidents in the next period.

Cover image:

The map shows the relative change in road deaths between 2013 and 2023.



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