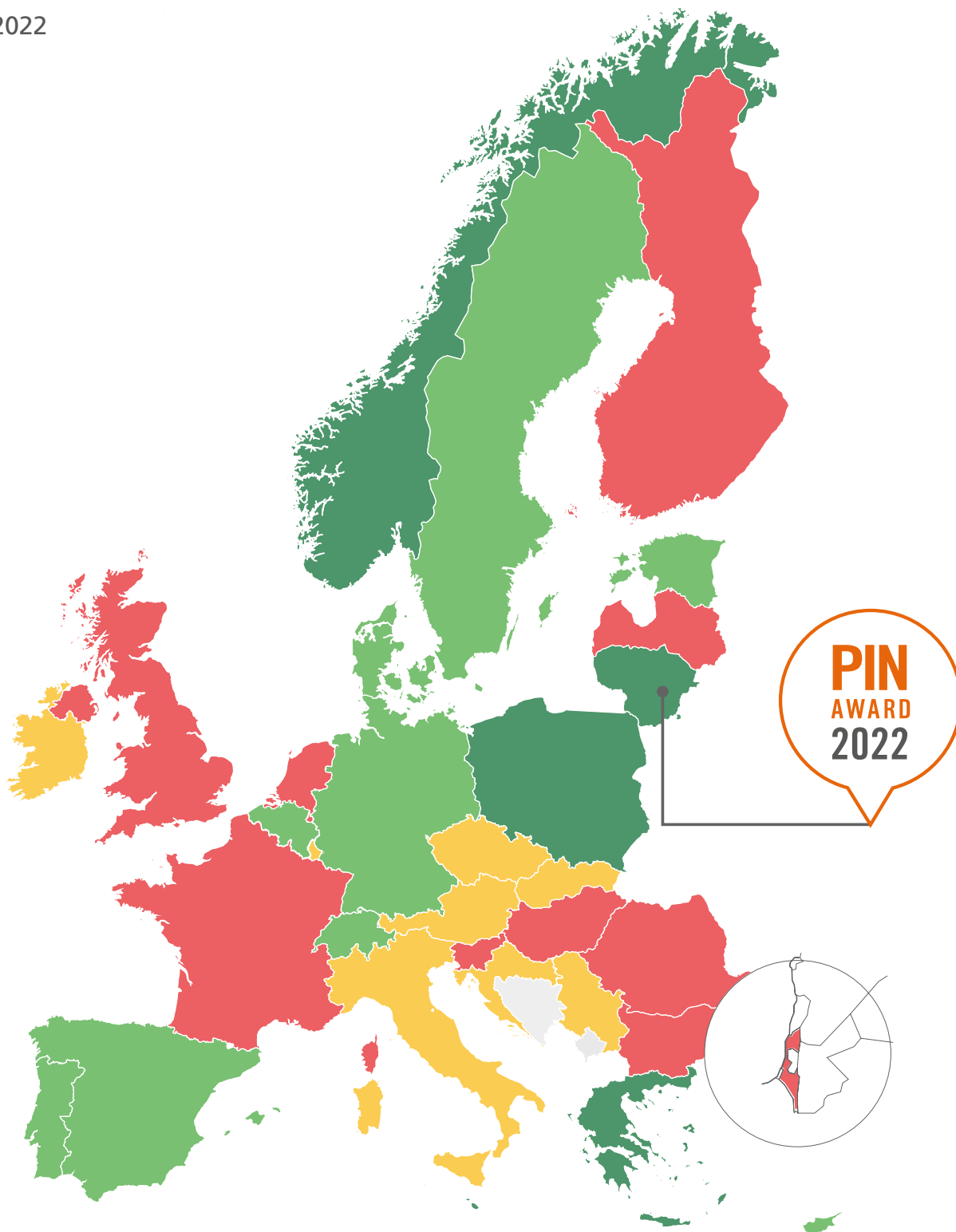


RANKING EU PROGRESS ON ROAD SAFETY

16th Road Safety Performance Index Report

June 2022



European Transport Safety Council

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RANKING EU PROGRESS ON ROAD SAFETY

16th Road safety performance index report

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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.

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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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FOREWORD

Antonio Avenoso,
ETSC Executive Director



In the introduction to last year's ETSC PIN annual report I posed the question whether, after the Covid pandemic subsides, Europe would embark on a new era of safer roads. Inspired by the pop-up bike lanes, flexibility on home working and other temporary measures introduced during the pandemic, perhaps there was a brighter future ahead where hundreds would no longer die on our roads every week?

I'm still optimistic that some trends accelerated by the pandemic will bring safety as well as environmental and health benefits. But I'm also more convinced than ever that road safety is not a problem that will fix itself.

Enforcement is a case in point. During the pandemic we noticed an unforeseen consequence of quieter roads: many countries reported larger numbers of speeding drivers. That was one reason why, though traffic volume declined dramatically during the Covid lockdowns, death and injury did not decline by the same amount. This was also partly due to a lack of enforcement – traffic police resources, already in decline before the pandemic, were diverted to enforcing lockdowns.

In March this year, ETSC published a comprehensive look at the state of traffic law enforcement across Europe. It was a mixed picture, which often reflects the picture of road safety in general. Sweden has 100 times more speed enforcement cameras per million inhabitants than Czechia. In Germany, 99% of rear seat passengers wear a seatbelt, in Italy, just

11%. Working towards a time when all Europeans can expect a high level of road safety, not one based on where they live, is at the heart of what ETSC's Road Safety Performance Index programme is all about. By highlighting the differences between countries on various road safety topics, we hope to encourage progress everywhere.

And progress should not be limited to the relatively poorly performing countries. Norway and Spain are a testament to the fact that countries with an already strong road safety record, can keep making remarkable improvements.

To do this takes constant effort, strategic planning, accountability, coordination, political will and, of course, investment. And that's why I've been impressed this year to read the strategic road safety plans that countries across Europe are putting into place in order to aim for the 2030 EU target to halve road deaths and serious injuries, and ultimately Vision Zero by 2050. More on this in Part 3 of this report.

Of course, to be effective, these documents must not just sit on a shelf somewhere: they need to be put into action, monitored and also evolve to meet new challenges. Automated driving and micromobility are two rapidly evolving developments where more work needs to be done. So far, policy has not kept up with reality.

Russia's invasion of Ukraine in February is a tragedy and a huge challenge for Europe. It has made it important to reduce European dependence on Russian oil and gas. ETSC and, importantly, the International Energy Agency, and the European Commission have since recommended reducing speeds on our roads to help reduce this dependence. That would bring a range of benefits. Reduced funding for Russian bombs, fewer road deaths in Europe, less emissions and fuel savings for all. Will Member States regional and local governments step up and slow down?

2021 was not exactly business as usual for road safety, the effects of the Covid pandemic were still very much in play. We don't yet know how the post-Covid era is going to look, and war in Europe makes life feel ever more unpredictable. But one thing is for sure, we have not vaccinated ourselves against the daily tragedy of road deaths in Europe. There is still much work to be done.

EXECUTIVE SUMMARY

The EU27 collectively reduced the number of road deaths by 31% over the period 2011-2021, from 28,865 in 2011 to 19,823 in 2021. There were 57,095 fewer deaths on EU roads over the last decade than there would have been if deaths had continued at the same level as in 2011.

The overall progress in reducing road deaths on EU roads was positive from 2011 until 2014 with a 16% decrease. But the good start to the decade was followed by five consecutive years of stagnation. In 2020 there was an exceptional drop of 17% compared to 2019, strongly related to Covid-19 travel restrictions across Europe. Similarly, 2021 saw a drop of 13% with respect to 2019, but the number of road deaths increased by 5% with respect to 2020, influenced by a gradual relaxation of travel restrictions across Europe.

Road deaths in the EU27 in 2021 were reduced collectively by an unprecedented 13% compared to 2019. In order to reach the 2030 EU target by uniform annual percentage reductions from the number in 2019, road deaths should decrease by 6.1% each year, which would mean a reduction of 11.8% by 2021. The larger reduction of 13% can, to a large extent, be attributed to Covid-19 lockdowns and restrictions. There is no guarantee that this progress can be maintained if traffic volumes revert to the way they were before the pandemic.

The number of people recorded as seriously injured, based on national definitions, decreased in 24 out of 28 PIN countries that collect data over the period 2011-2021. In the EU23 collectively, serious road traffic injuries dropped by 18%. Numbers of serious road traffic injuries in the EU as a whole stagnated during most of the decade, to suddenly drop in 2020 during the Covid-19 lockdowns.

In December 2021, the European Commission proposed new rules governing the Trans-European Transport (TEN-T) networks. The most important safety-related update is to ensure TEN-T roads meet the standards set out in the 2019/1936 road infrastructure safety management directive. The newly proposed TEN-T regulation sets a timeline for the 'core network' to be upgraded to separate

carriageways for the two directions of traffic by 2040 with exemptions for roads with low traffic density. Another proposed change is that 424 major cities that are located on major European roads ('urban nodes') will be required to produce Sustainable Urban Mobility Plans (SUMP) by 2025. Member States will also have to submit urban mobility data for urban nodes by 2025 and annually after this including collisions, injuries and modal share.

As of 2021, the minimum Infrastructure Safety Management procedures as set by the revised Directive 2019/1936 have been extended beyond the TEN-T network and will apply to all motorways, all "primary roads" and all non-urban roads that receive EU funding. A European Commission Expert Group is currently developing a new methodology for network-wide risk assessment. EC guidance on quality requirements regarding vulnerable road user safety is also due for development in 2022 within the same Expert Group framework.

Updated rules on cross-border enforcement of traffic offences and on driving licences are currently under preparation and are expected at the end of 2022.

Country efforts will be critical across Europe and thus in the EU for the implementation of the Safe System approach for achieving the 2030 targets. Of the 32 PIN countries, nearly all reported having a new road safety strategy either in place or under development for the decade to come.

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 in the coming decade.

There is some way to go in terms of developing some of these KPIs, collecting the data and setting KPI targets. The monitoring of the KPI on safety belts seems the most advanced, with 30 PIN countries reporting they collect or planning 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 monitored. Monitoring infrastructure, post-crash care and vehicle safety KPIs seem the least well advanced.

Note on countries covered by the ETSC PIN programme

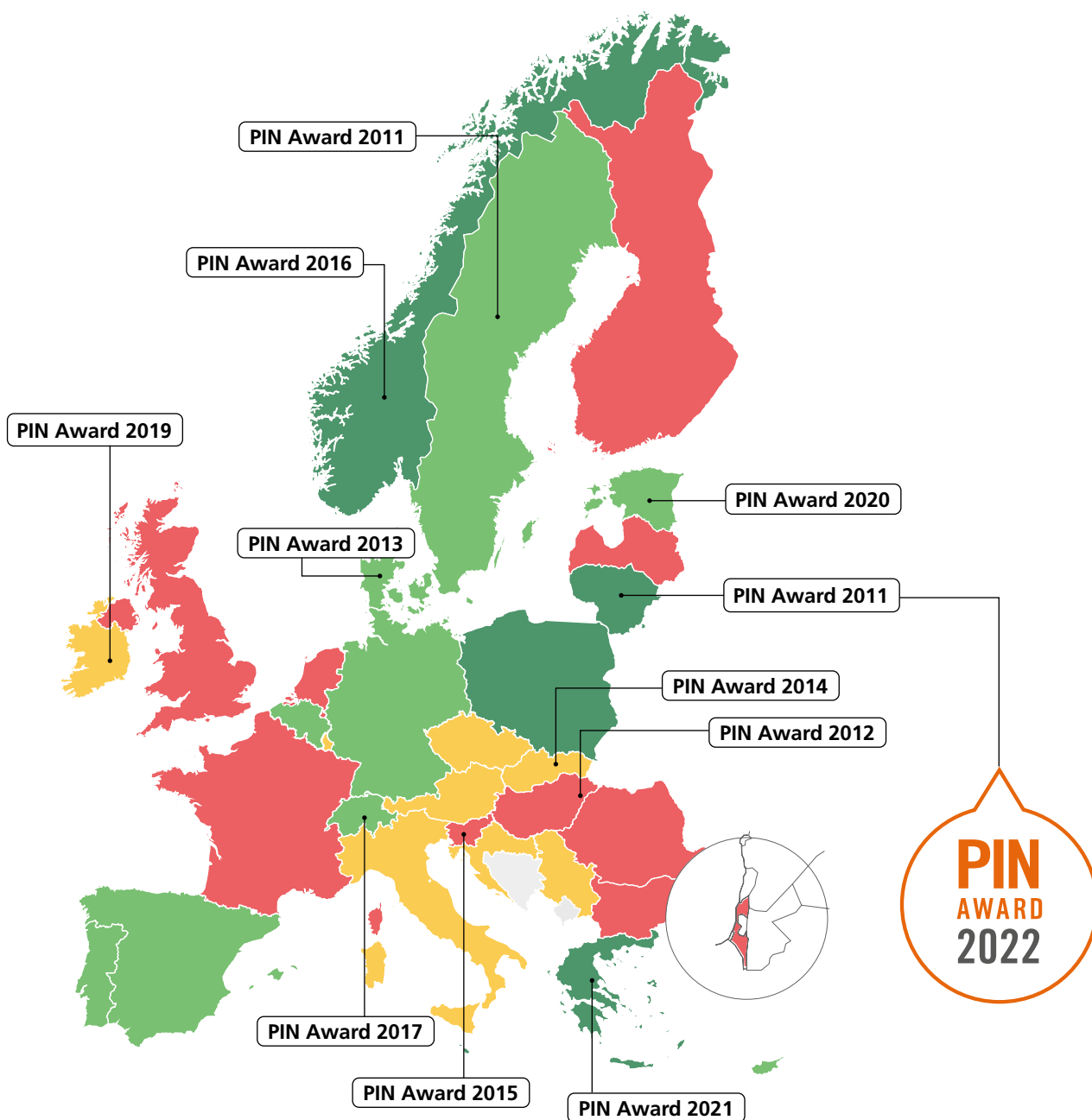
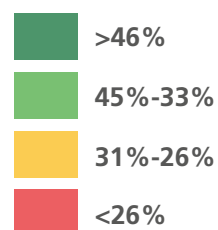
This report includes aggregate data analysis covering the 32 countries that participate in ETSC's Road Safety Performance Index (PIN) programme. They are:

- 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.

MAP 1:

Relative change in road deaths between 2011 and 2021 and recipient countries of the PIN Award over the period 2011-2021 (Fig.3, Table 1 in the annexes)



MAIN RECOMMENDATIONS TO THE 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 and adopting shared overall responsibility and accountability between system designers and road users.¹
- For countries who have not yet done so, adopt road safety plans, including national targets for reducing serious injuries based on the MAIS3+ standard alongside the 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.²
- Apply safe speed limits in line with the Safe System approach for the different road types such as 30 km/h on urban roads in residential areas and areas where there are high levels of cyclists and pedestrians, 70 km/h on undivided rural roads and a top speed of 120km/h or less on motorways³ to meet new EU energy saving goals and reap the benefits of synergies with EU climate and safety goals.⁴
- Provide sufficient government funds to allow the target-oriented setting of measures and set up financing and incentive models for the regional and local level.
- 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, including serious injuries 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 foreseen road safety measures in reaching road safety targets.
- In EU Member States, 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.
- In EU Member States, prepare to implement network-wide road safety assessment and meet the deadline of 2024 set by the 2019 Road Infrastructure Safety Management Directive.⁵
- Support cities in their efforts to introduce Sustainable Mobility Plans which include road safety measures and targets.

MAIN RECOMMENDATIONS TO THE EUROPEAN COMMISSION

- Create a new EU agency to support safe, smart and sustainable transport operations.

Within the context of the implementation of the EU Road Safety Policy Framework 2021-2030:⁶

- Introduce specific measures to reduce serious injuries, in light of the new target.
- Develop legislation, where appropriate, instead of unenforceable voluntary commitments.
- Launch the expert group to prepare the Guidance on VRU safety under the 2019 Road Infrastructure Safety Management Directive.

Following the adoption of the revision of the General Safety Regulation (GSR)⁷ on new minimum safety standards for new vehicles:

- Deliver on the estimated number of deaths and seriously injured to be prevented by adopting strong secondary legislation implementing the General Safety Regulation.

Within the context of the EU strategy on automated mobility:⁸

- Develop a coherent and comprehensive EU regulatory framework for the safe deployment of automated vehicles.⁹
- Revise type approval standards to cover all the new safety functions of automated vehicles, to the extent that an automated vehicle will pass a comprehensive test equivalent to a 'driving test'. This should take into account high-risk scenarios for occupants and road users outside the vehicle.

¹ ITF-OECD (2008), Towards Zero, Ambitious Road Safety Targets and Safe System Approach, <https://bit.ly/2Mvk1QL>

² EC Recommendation 2004/345 on Enforcement in the Field of Road Safety, <http://bit.ly/39aWdh3>

³ ETSC (2019), PIN Flash 36, Reducing Speeding in Europe <https://bit.ly/38ueB1q>

⁴ European Commission (2022), Communication EU 'Save Energy' <https://bit.ly/3LErqqb>

⁵ Directive (EU) 2019/1936 on road infrastructure safety management, <http://bit.ly/2XTGwkd>

⁶ European Parliament, Report on EU Road Safety Policy Framework 2021-2030 – Recommendations on next steps towards "Vision Zero", <https://bit.ly/3rCE9ld>

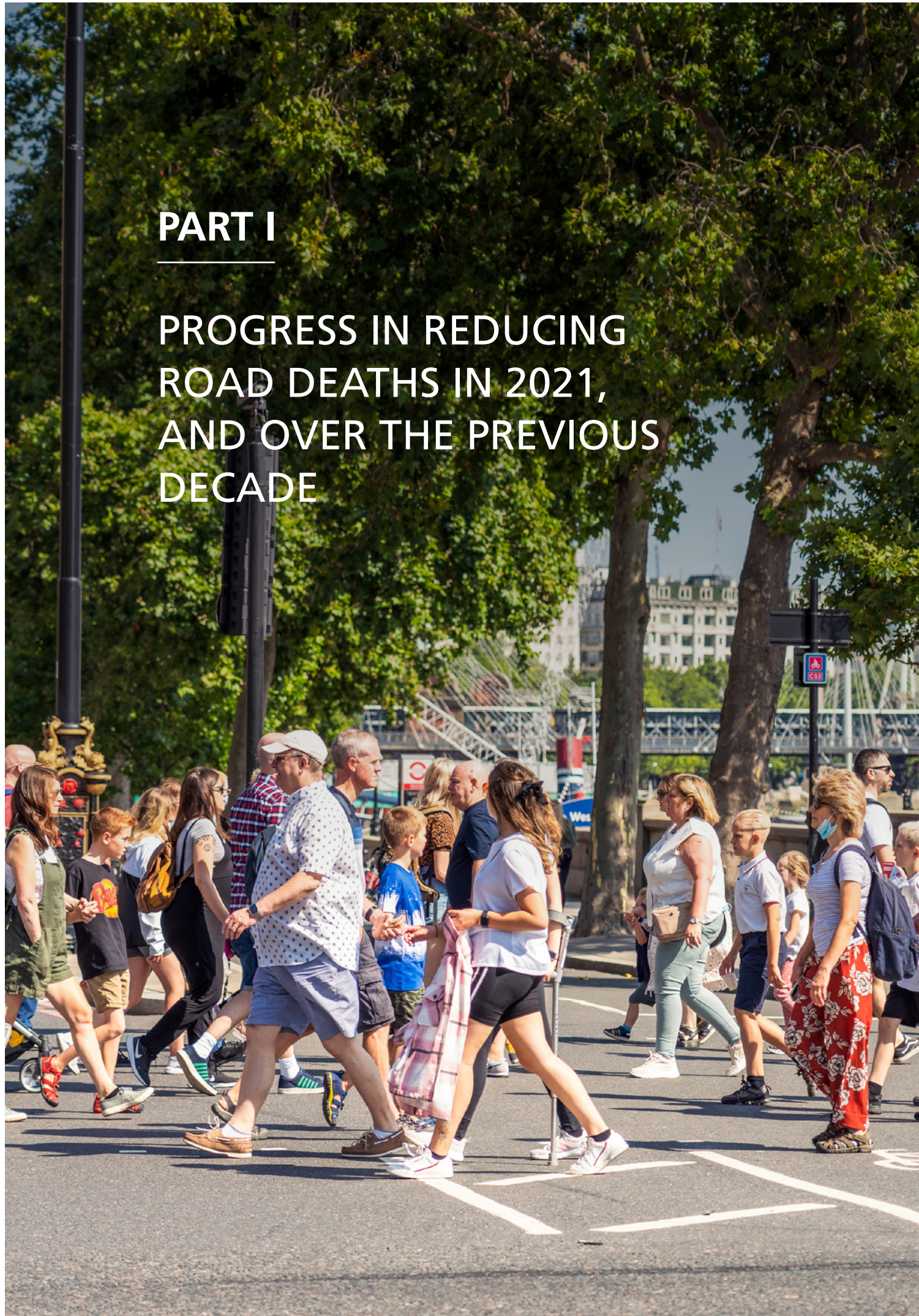
⁷ Regulation (EU) 2019/2144 on type-approval requirements for motor vehicles and their trailers, and systems, components and separate technical units intended for such vehicles, as regards their general safety and the protection of vehicle occupants and vulnerable road users, <https://bit.ly/2CRJWe6>

⁸ European Commission (2018), Communication On the road to automated mobility: An EU strategy for mobility of the future, <https://goo.gl/kdqY6V>

⁹ ETSC (2016), Prioritising the Safety Potential of Automated Driving in Europe, <https://goo.gl/TojCUL>

PART I

PROGRESS IN REDUCING ROAD DEATHS IN 2021, AND OVER THE PREVIOUS DECADE



INDICATOR

The EU 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 between 2011 and 2021 (Fig.1 and Fig.3) and between 2019 and 2021 (Fig.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 (Fig.5). Additionally, the risk expressed as the number of road deaths per billion vehicle km travelled is presented in countries where the data are available (Fig.6).

The data used are from national statistics supplied by the PIN panellist in each country. The numbers of road deaths in 2021 in Belgium, Czechia, Germany, Denmark, Finland, France, Hungary, Ireland, Italy, Luxembourg, Latvia, Lithuania, Portugal and Sweden 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 2021 are the provisional total for Great Britain for the year 2021 together with Northern Ireland's total for the calendar year 2021.

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

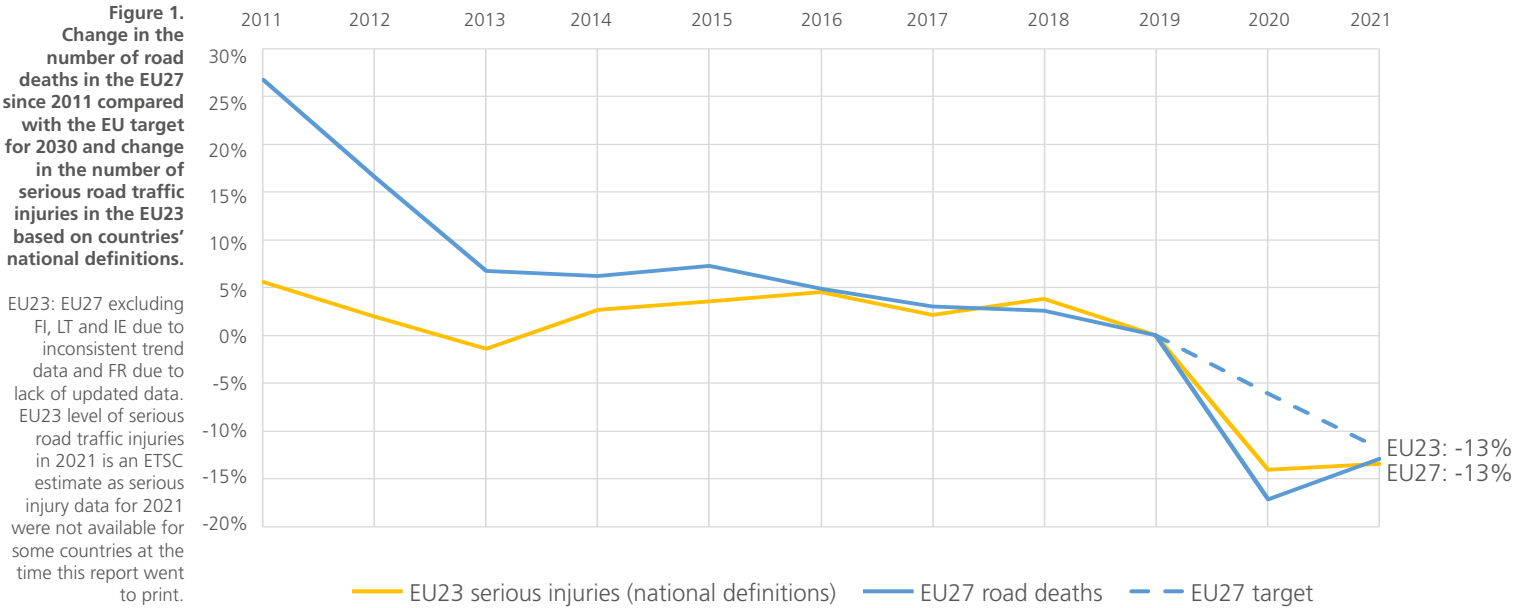
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1.1 ROAD DEATHS DECREASED BY 31% BETWEEN 2011 AND 2021

The EU27 collectively reduced the number of road deaths by 31% over the period 2011-2021 (Fig.1). There were 19,823 road deaths on EU roads in 2021, 57,095 fewer than there would have been if deaths had continued at the same level as in 2011 (Fig. 2).

The overall progress in reducing road deaths on EU roads was positive from 2011 until 2014 with a 16% decrease. But the good start was followed by five consecutive years of stagnation with only a 7% reduction over the 2015-2019 period. In 2020 there was an exceptional drop of 17% compared to 2019. The 2020 result was strongly related to travel restrictions across Europe due to the Covid-19 pandemic. 2021 also saw a consistent drop of 13% with respect to 2019, but the number of road deaths increased by 5% with respect to 2020, influenced by a gradual relaxation of travel restrictions across Europe.

The progress in reducing serious road traffic injuries in the last decade in the EU23¹⁰ collectively was poor, especially in comparison with the reduction in road deaths. There was only a 18% reduction over the period 2011-2021 (Fig.1). The number of serious injuries remained almost unchanged until 2019. As with road deaths, there was a substantial drop, though of



¹⁰ EU23: EU27 excluding FI, LT and IE due to inconsistent trend data and FR due to lack of updated data.

only 13%, in 2020 compared to 2019 and the number of seriously injured remained stable in 2021 with a 0.5% decrease compared to 2020.

The exceptional 2020 and 2021 results were largely a consequence of Covid-19 lockdowns and associated measures. There is no guarantee that this progress can be maintained under a return to business as usual.

1.2 57,095 LIVES SAVED SINCE 2011 IS OF CONSIDERABLE VALUE

57,095 road deaths have been prevented in the EU over the period 2012-2021 compared with the number that would have been recorded if each Member State had continued to record the same number each year as in 2011. 30,509 more lives could have been saved if the annual reduction of 6.7% had been reached (Fig.2, left column).

Putting a monetary value on prevention of loss of human life can be debated on ethical grounds.

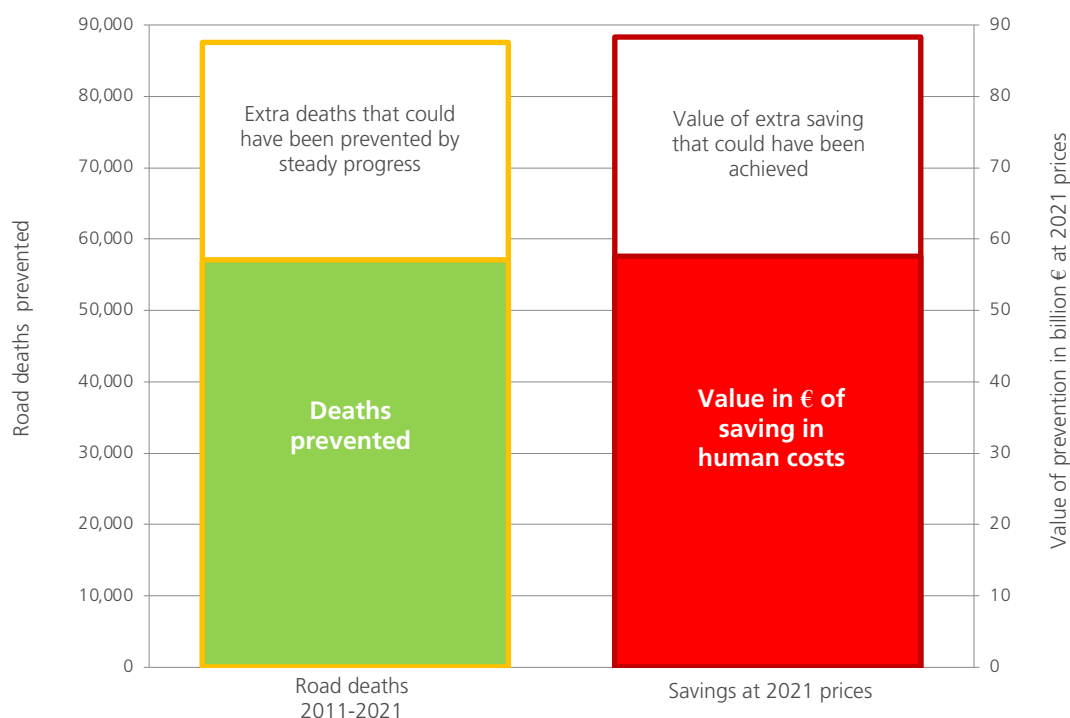
However, doing so makes it possible to assess objectively the costs and the benefits of road safety measures and helps to make the most effective use of generally limited resources.

The Value of Preventing one road Fatality (VPF), estimated for 2016 in the EU Handbook on the external costs of transport (2019),¹¹ has been updated in this PIN report to take account of changes to the economic situation in the intervening years. As a result, we have taken the monetary value for 2021 of the human losses avoided by preventing one road death to be €2.8 million at market prices in 2021.¹²

The total value of the human losses avoided by reductions in road deaths in the EU27 for 2021 compared with 2011 is estimated at approximately €9 billion, and the value of the reductions in the years 2012-2021 taken together compared with 2011 is about €64 billion (Fig.2, right column).

If the EU had moved at constant progress of 6.7%, the greater reductions in deaths in the years 2012-2021 would have increased the valuation of the benefit to society by about €36 billion to about €101 billion over those years (Fig.2, right column).

Figure 2.
Reduction in the number of road deaths in EU27 over the period 2011-2021 and valuation at 2021 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 had a steady annual reduction of 6.7%.



¹¹ European Commission (2019), Handbook on the external costs of transport, <http://bit.ly/2t4gAr7>

¹² For more information, see ETSC (2020), Updated methodological note to the 14th Road Safety Performance Index (PIN) Report.

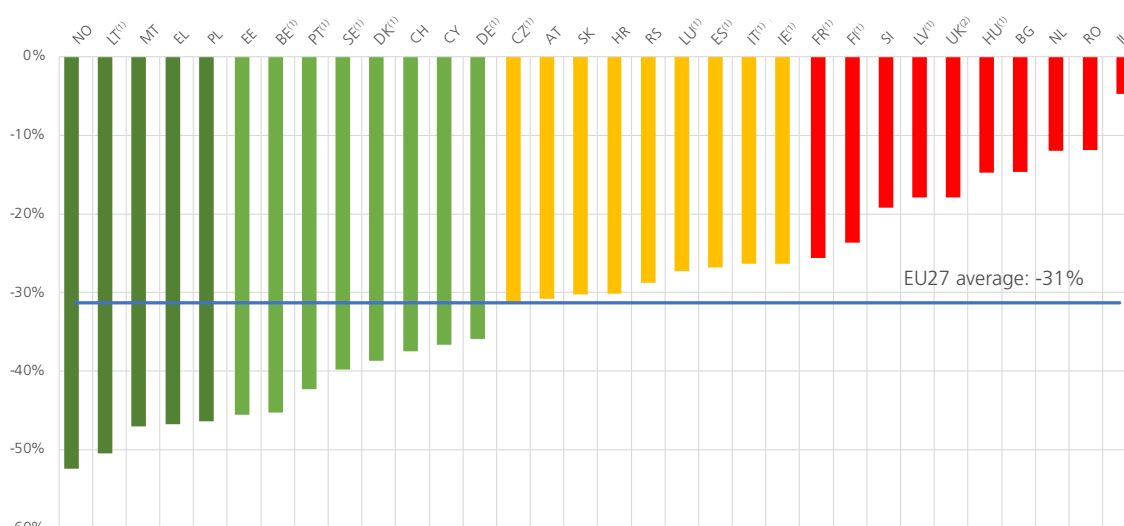
1.3 ONLY ONE EU MEMBER STATE HALVED THE NUMBER OF DEATHS OVER THE LAST DECADE

Just one EU Member State halved the number of road deaths over the last decade – Lithuania (Fig.3). Norway has reduced the number of road deaths by 52% since 2011. Malta, Greece, Poland, Estonia, Belgium, Portugal, Sweden, Denmark, Switzerland, Cyprus and Germany achieved a decrease above the EU average of 31%, while other countries progressed to a lesser extent. The progress was slowest in Israel with a 5% decrease and in the Netherlands and Romania with a 12% decrease. Every country's road safety performance in 2021 and 2020 was affected by the Covid-19 lockdowns.

Figure 3.
Relative change in
road deaths between
2011 and 2021

⁽¹⁾National provisional estimates used for 2021, as final figures for 2021 are not yet available at the time this report went to print.

⁽²⁾UK data for 2021 are the provisional total for Great Britain for the year 2021 combined with the total for Northern Ireland for the calendar year 2021. The annual number of deaths in LU and MT are particularly small and, therefore, subject to substantial annual fluctuations. The annual numbers of deaths in CY and EE are also relatively small and may be subject to annual fluctuations.



The 2021 ETSC Road Safety PIN Award was presented to Lithuania on 15 June 2022. The award recognises Lithuania's long term performance in improving road safety. The background to the country's recent progress is detailed in an interview with Marius Skuodis, Minister of Transport and Communications in Part IV.



BELGIUM

A NEW FEDERAL ROAD SAFETY PLAN ADOPTED TO REACH THE EU 2030 TARGET

Road deaths in Belgium were reduced by 45%, from 884 in 2011 to 484 in 2021. In 2021 road deaths decreased by 25% with respect to 2019. In the last decade serious injuries were reduced by 48%.

In 2021 the Federal government and the three regions (Flanders, Wallonia and Brussels) adopted a new federal road safety plan, aiming to halve road deaths by 2030 and to reach 'Vision Zero' by 2050.

Tackling speeding has been a priority for Belgium in recent years. Belgium is the fourth PIN country in terms of speeding tickets issued, with 352 tickets per thousand population.¹³ In addition, while in 2017 there were only seven average speed cameras, in 2020 there were more than 1200, mainly in Flanders.¹⁴



GREECE

ROAD SAFETY IMPROVEMENTS CONTINUE SINCE RECEIVING THE PIN AWARD IN 2021

Road safety improvements have continued since Greece received the PIN Award in 2021. Road deaths in Greece were reduced by 47% over the period 2011-2021. The background to the 2021 Award is detailed in an interview with Kostas Karamanlis, Minister of Infrastructure and Transport in the 15th Annual ETSC PIN Report.¹⁵

The new National Strategic Plan 2021-2030 will define, implement and monitor the actions needed to drastically reduce the number of road collisions and related casualties. For instance, the government is working with local authorities to increase the number of 30km/h zones and the number of advanced stop zones for motorcyclists before an intersection with traffic lights. Another priority measure under consideration is the automatisisation of speeding ticket processing.

"Over the last 17 years, the Hellenic Road Safety Institute (RSI) "Panos Mylonas" has trained more than 250,000 school children and reached millions of citizens through its campaigns. RSI is also implementing a pilot programme on speed

enforcement in close collaboration with the Traffic Police and the UK Safer Roads Foundation."

Vassiliki Danelli-Mylona, Hellenic Road Safety Institute (RSI)
"Panos Mylonas"



FINLAND

HOPE NEW ROAD SAFETY STRATEGY DELIVERS BOOST TO TRAFFIC SAFETY WORK

Road deaths have only been reduced by 24% in Finland over the last decade, down from 292 in 2011 to 223 in 2021. From 2019 to 2021 the number of road deaths increased by 6% from 211 to 223. Finland is falling behind other Nordic countries.

An issue of concern is the change to driving licence legislation from 2018, which made it easier to get a car driving licence at the age of 17. An exception permit issued by the Finnish Transport and Communication Agency is needed in order to apply for the driving licence at 17, but the rejection rates for such permit are very low. Newly proposed changes to the driving licence law will make getting a car driving licence at the age of 17 even easier. Only the agreement of a parent or guardian will be needed when applying for a driving licence, instead of an exception permit application.

In order to improve the safety of all modes of transport, the Finnish government published a new Transport Safety Strategy, covering the period 2022-2026.¹⁶

"Finland's new road safety strategy will hopefully bring a boost to national and regional traffic safety work by increasing the coordination, co-operation and the level of commitment in all sectors to reach the targets set in the 2026 strategy."

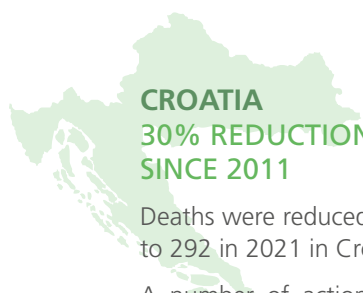
Esa Rätty, Finnish Crash Data Institute (OTI)

¹³ ETSC (2021), How traffic law enforcement can contribute to safer roads, PIN Flash 42, <https://bit.ly/38E6Etn>

¹⁴ ITF/IRTAD (2020), Road Safety Report Belgium, <https://bit.ly/3t3xgL2>

¹⁵ ETSC (2022), Ranking EU progress on road safety, 15th Annual PIN report, <https://bit.ly/3LYBme3>

¹⁶ Government resolution: Transport Safety Strategy aims to improve the safety of all modes of transport - Ministry of Transport and Communications <https://bit.ly/39Uw5XT>



CROATIA **30% REDUCTION IN ROAD DEATHS** **SINCE 2011**

Deaths were reduced by 30% from 418 in 2011 to 292 in 2021 in Croatia.

A number of actions have contributed to the reduction in road deaths in Croatia including updating legislation to align with EU laws, preventative actions by the Police and an increased awareness among the general population of road safety issues. Improvements in vehicle safety have also contributed to the reduction.

Croatia is also one of the few EU countries to have a national enforcement strategy in place. The number of fixed speed cameras increased significantly in Croatia from 21 in 2015 to 104 in 2021. Seat belt wearing rates have also improved over the decade and yet still remain as low as 81% in front seats and 36% in rear seats.¹⁷



POLAND **NEW ROAD TRAFFIC LAWS** **INTRODUCED IN 2021**

A number of new road traffic laws came into force in Poland on 1st June 2021. These laws set a full-time 50km/h speed limit on urban roads, gave priority to pedestrians at pedestrian crossings and approaching the crossing, and introduced a ban on using mobile phones while crossing the road. Before the introduction of these laws the night time speed limit was 60km/h.

1.4 A 13% REDUCTION IN ROAD DEATHS IN THE EU IN 2021 CAN BE PARTLY EXPLAINED BY THE COVID-19 PANDEMIC

Out of 32 countries monitored by the PIN programme, 25 registered a decrease in road deaths in 2021, compared to 2019 (Fig.4). Malta¹⁸ was ranked first with a 44% reduction in the number of road deaths between 2019 and 2021. It is followed by Denmark with 32%, Norway with 26%, Belgium with 25%, Poland with 23%, Lithuania with 21%. An 18% decrease was

registered in Portugal, 16% in Germany, 14% in Spain and Czechia and 13% in Cyprus¹⁹, Sweden and Austria.

Road deaths in the EU27 in 2021 were reduced collectively by an unprecedented 13% compared to 2019. In order to reach the 2030 EU target, road deaths should decrease by 6.1% each year, using 2019 as a base year. Yet, the exceptional 2021 results can to a large extent still be attributed to Covid-19 lockdowns and restrictions. Investigations into the impact of Covid-19 on driving behaviour in Greece show that during the lockdowns in March and April 2020, traffic volumes dropped but at the same time, average speeds increased by 6 to 11%, harsh acceleration and harsh braking events increased by up to 12% and mobile phone use at the wheel increased by 42%.²⁰

The effect of the unprecedented restrictions on travel and traffic volumes in 2020 has been well documented and demonstrates that there was a significant reduction in traffic. An OECD report for instance found that, overall, traffic volumes were down 12% in 2020 on the average for 2017-19 across the 11 countries that collect data on travel volume.²¹

In Figure 4 we can see that the number of km driven by motor vehicles decreased compared to 2019 in all ten countries that could provide data for this report (Fig.4). In seven countries – Denmark, Germany, Lithuania, Italy, Portugal Norway and Sweden – road deaths decreased by a greater degree than traffic volumes. In Croatia road deaths decreased by a lesser degree than traffic volumes. In Estonia and Finland, the number of road deaths increased while distance travelled went down.

The Covid-19 pandemic also led to significant changes in mobility patterns, often with more people walking, cycling and trying new forms of mobility. In the Netherlands the number of km travelled on foot rose by 29% in 2020 compared to 2019.²² Likewise, in Italy, the share of all journeys that were taken on foot rose from 21% in 2019 to 29% in 2020. A review of available international literature on the impacts of Covid-19 on mobility, behaviour and safety also found that

¹⁷ ETSC (2022), How traffic law enforcement can contribute to safer roads, PIN Flash 42, <https://bit.ly/38E6Etn>

¹⁸ The annual number of road deaths in Malta is particularly small and, therefore, subject to substantial annual fluctuations.

¹⁹ The annual number of road deaths in Cyprus is particularly small and, therefore, subject to substantial annual fluctuations.

²⁰ Katrakazas C., Michalaraki E., Sekadakis M., Yannis G. (2020) A descriptive analysis of the effect of the COVID-19 pandemic on driving behavior and road safety <https://bit.ly/3wuygdq>

²¹ ITF (2021), Road Safety Annual Report 2021: The Impact of Covid-19. <https://bit.ly/39HHyda>

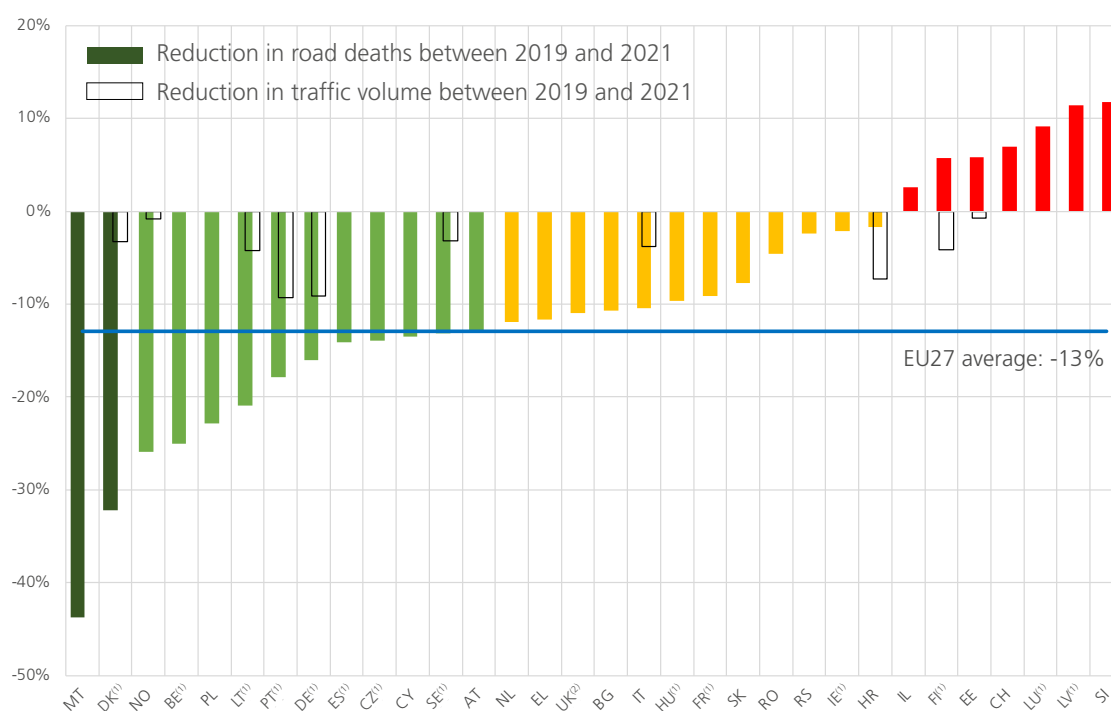
²² CBS (2022) On the move in the Netherlands (ODiN) 2018-2020 (in Dutch) <https://bit.ly/3wuWOMq>

a comparatively higher share of vulnerable road user travel was noted on the urban and suburban system. In addition, public transport usage declined and did not recover as quickly as other transport modes once restrictions were lifted.²³

Figure 4.
Relative change in road deaths between 2019 and 2021 and corresponding percentage change in traffic volume.

⁽¹⁾National provisional estimates used for 2021, as final figures for 2021 were not available at the time this report went to print.

⁽²⁾UK data for 2021 are the provisional total for Great Britain for the year 2021 combined with the total for Northern Ireland for the calendar year 2021. 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 also relatively small and, therefore, may be subject to annual fluctuations.



Note: traffic volume data collection methodologies differ between countries and are not comparable. Some data on traffic volumes cover only part of the road network. CZ – traffic volume data on motorways and roads of 1st, 2nd and 3rd class category where 83% of road deaths occur. LT – traffic volume data on main roads.

1.5 NORWAY - THE SAFEST COUNTRY FOR ROAD USERS

In the EU27, the overall level of road mortality was 45 deaths per million inhabitants in 2021 compared to 66 per million in 2011 (Fig.5).

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

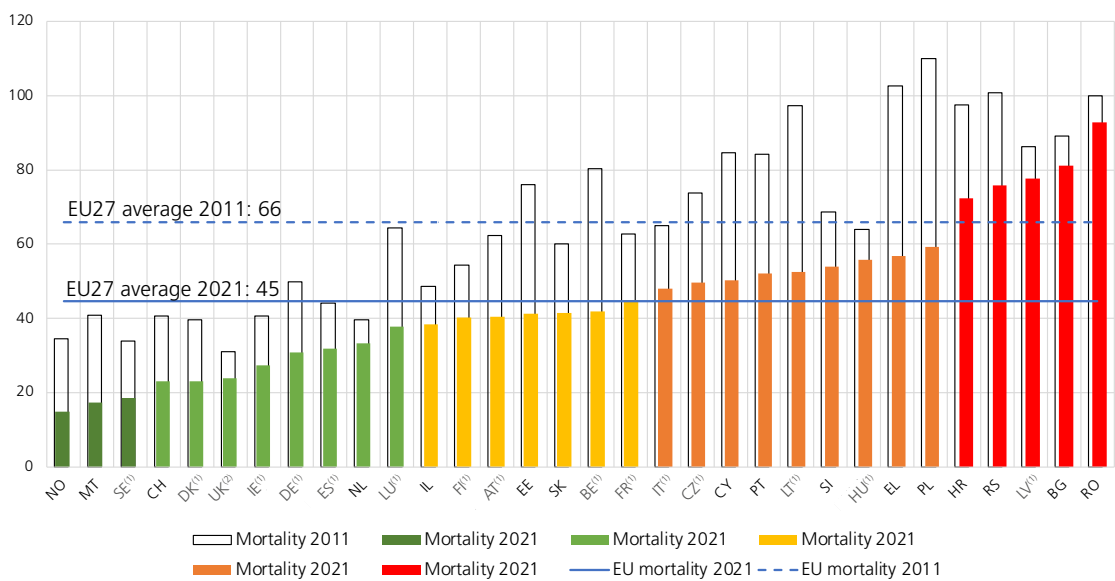
Norway remains the leader among PIN countries with 15 road deaths per million inhabitants, Malta follows with 17 deaths per million inhabitants in 2021. In Sweden, Switzerland, Denmark and the UK, road mortality is below 27 deaths per million. The highest road mortality is in Romania and Bulgaria with 92 and 81 road deaths per million inhabitants respectively.

²³ Machata K., Soteropoulos A., Ševrovič M. (2021) Effects of the COVID-19 pandemic on the status of road safety <https://bit.ly/3GFZ1iA>

Figure 5.
Mortality (road deaths per million inhabitants) in 2021 (with mortality in 2011 for comparison).

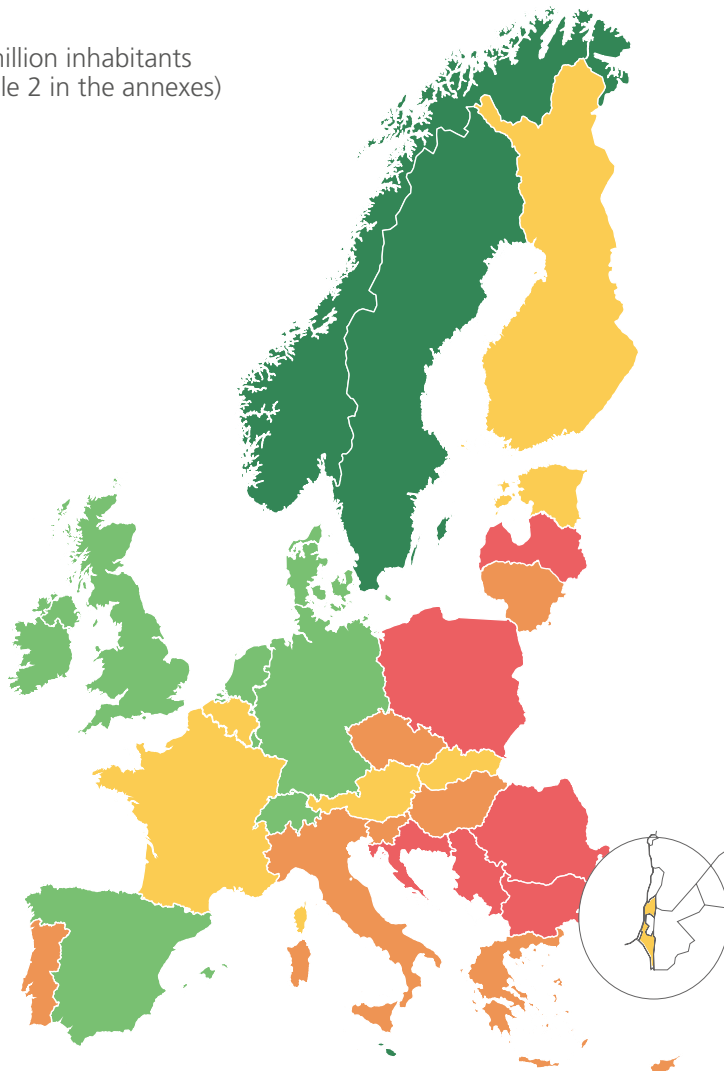
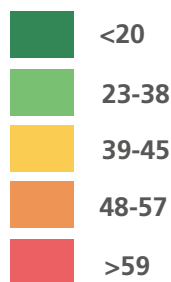
⁽¹⁾National provisional estimates used for 2021, as final figures for 2021 were not available at the time this report went to print. The annual number of deaths in LU and MT are particularly small and, therefore, subject to substantial annual fluctuations.

⁽²⁾UK 2021 estimate is based on GB provisional total for the year 2021 and the provisional data for Northern Ireland for the calendar year 2021, population data is an estimate for the year 2021.



MAP 2:

Road deaths per million inhabitants in 2021 (Fig.5, Table 2 in the annexes)



1.6 ROAD DEATHS PER VEHICLE-DISTANCE TRAVELLED

Fig.6 shows road deaths per billion motor vehicle-km travelled for the 21 PIN countries where up-to-date data are available. This indicator complements the well-established indicator of road mortality (Fig.5).

Measured in this way, Norway, Sweden, Great Britain, Switzerland, Ireland, Denmark, Germany and Slovakia top the ranking with the lowest number of deaths per motor vehicle-km among the countries collecting up-to-date countrywide data (Fig.6). The rate in Latvia is about four times higher than in the countries at the top of the ranking.

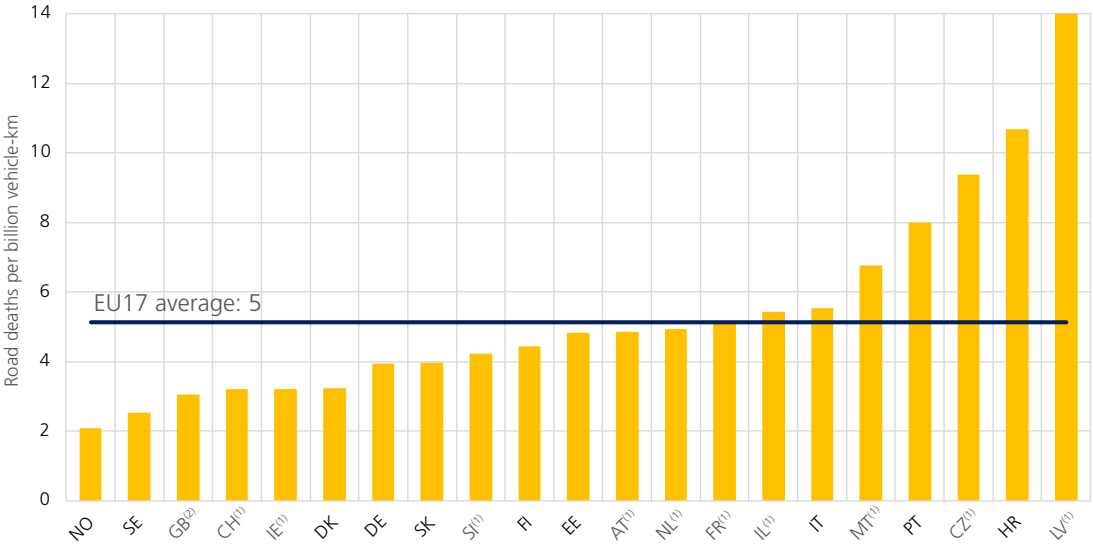
Differences between the relative positions of countries in Fig.5 and Fig.6 can arise from differences in aspects such as the levels of motorcycling, cycling or walking, the traffic volume, the proportions of traffic on motorways and rural roads, different methods for estimating the distance travelled or other factors.

For example, Malta has the lowest road mortality rate in the EU, but the number of road deaths per vehicle-km travelled is above the average of the countries that can provide data on distance travelled. This can largely be attributed to the short vehicle distances travelled in Malta and a high proportion of travel that takes place in urban areas when compared to other countries.

Figure 6. Road deaths per billion vehicle-km 2019-2021 average. Average for the latest three years for which both the road deaths and the estimated data on distance travelled are available.

⁽¹⁾2018-2020, EU17 average: EU27 excluding BE, BG, CY, EL, ES, LU, LT, HU, PL and RO due to lack of data on vehicle distance travelled.
⁽²⁾GB: data for 2021 are an estimate based on data for Jan-Sep 2021 and Oct-Dec 2019

Note: single cyclist deaths are included in the road death data used in this figure.



RECOMMENDATIONS TO THE 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 and adopting shared overall responsibility and accountability between system designers and road users.²⁴
- For countries who have not yet done so, adopt Road Safety Plans, including national targets for reducing serious injuries based on the MAIS3+ standard alongside the 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.²⁵
- Provide sufficient government funds to allow the target-oriented setting of measures and set up financing and incentive models for the regional and local level.
- 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, including serious injuries in the impact assessment of counter measures.
- Conduct a thorough qualitative assessment of current road safety strategies to evaluate the levels of implementation and effectiveness of the foreseen road safety measures in reaching road safety targets.

²⁴ OECD-ITF (2016), Zero Road Death and Serious Injuries, Leading a Paradigm Shift to a Safe System approach, <https://goo.gl/hTE4BG>

²⁵ EC Recommendation on Enforcement in the Field of Road Safety 2004/345, <http://goo.gl/Vw0zhN>



PART II

SERIOUS INJURIES: LITTLE PROGRESS SINCE 2011



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.

HOW ARE SERIOUS INJURY DATA COLLECTED ACROSS THE EU?

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.²⁶ These correction factors are likely to be different by 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. The study 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.²⁷

²⁶ SafetyCube (2016), Practical guidelines for the registration and monitoring of serious traffic injuries, Deliverable 7.1, <https://goo.gl/hWHPCG>

²⁷ Ibid

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 the adoption of the Valletta Declaration on road safety in 2017 by EU transport ministers which had called for such a target.

In 2020, the European Commission updated the estimated number of serious road traffic injuries. According to this estimate, 120,000 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).²⁸

2.2 MOST COUNTRIES REDUCED THE NUMBER OF SERIOUSLY INJURED SINCE 2011

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.

Fig.7 shows the relative change in the number of serious injuries over the period 2011-2021 using current national definitions of serious injury.

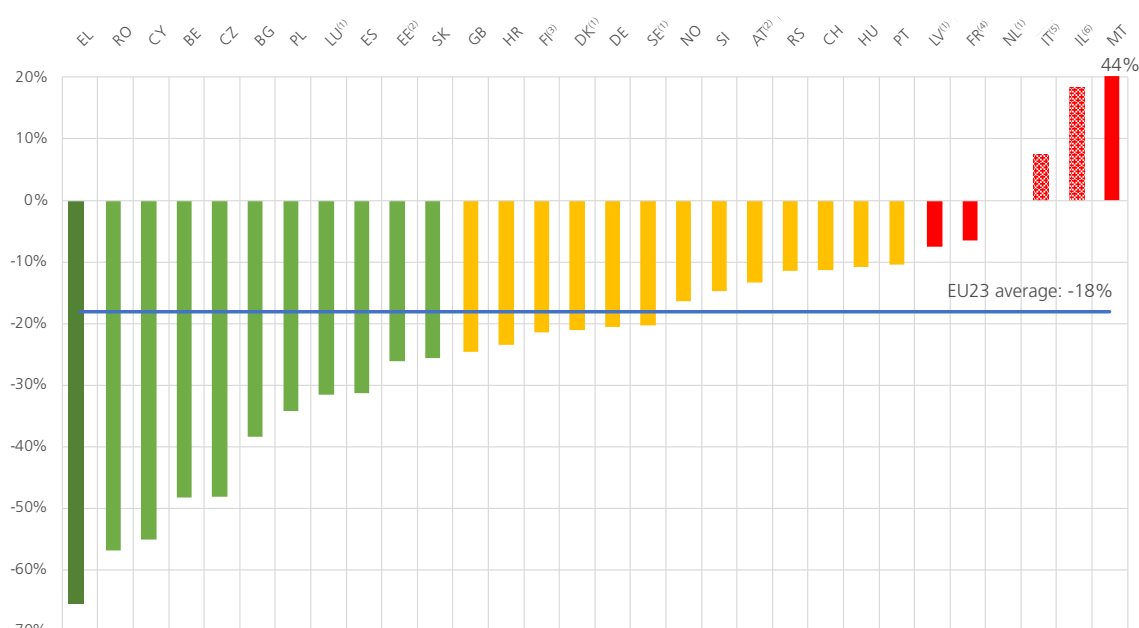
The number of people recorded as seriously injured, based on national definitions, decreased in 24 out of 28 PIN countries that collect data. In the EU23 collectively, serious road traffic injuries dropped by 18.5% over the period 2011-2021 (Fig.7). Numbers of serious road traffic injuries in the EU as a whole stagnated during most of the decade, to suddenly drop in 2020 during the Covid-19 lockdowns. The number of recorded serious injuries went down by 65% in Greece, 57% in Romania and 55% in Cyprus. The number of recorded serious injuries increased by 44% in Malta for the period 2011-2021, 18% in Israel for the period 2013-2020 and 8% in Italy for the period 2012-2020. The increase in Italy could also be the effect of the improved quality of hospital data mainly in identifying people injured in a road collision.

²⁸ European Commission (2020), Road Safety: Europe's roads are getting safer but progress remains too slow, <https://bit.ly/37GXvv6>

Figure 7.
Relative change in
recorded seriously
injured (national
definitions) over the
period 2011 and 2021
for countries where
data are available.

The years covered vary:
(1) 2011-2020,
(2) 2012-2021,
(3) 2014-2020,
(4) 2011-2017,
(5) 2012-2020, MAIS3+,
(6) 2013-2020, MAIS3+

EU23: EU27 excluding
FI, LT, and IE due to
inconsistent trend
data and FR 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. 7, 8 AND 9

It is not possible to compare the number of seriously injured between Member States because of the different national definitions of serious injury, together with differing levels of underreporting. It is also too early to use data based on MAIS 3+ 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 2011 (Fig.7). The changes in these numbers since 2011 are compared to the corresponding changes in the numbers of deaths since 2011 (Fig.9). Fig.8 shows the number of seriously injured road users based on national and MAIS3+ definitions per one road death recorded by the police in PIN countries where data are available.

The numbers of seriously injured were supplied by the PIN panellist in each country. The full dataset, together with the national definitions, is available in the annexes. All PIN countries collect data on “serious” injuries. The numbers of people seriously injured based on the national definition in 2021 are provisional in Belgium, Germany, Spain, Greece, Hungary, Portugal and Serbia.

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 which have no longer-term consequences.

2.3 LARGE DIFFERENCES IN THE NUMBERS OF 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 (Fig.8). Therefore, serious injury numbers depend on definitions, data collection methodologies and data quality.

Fig.8 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.²⁹ 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.

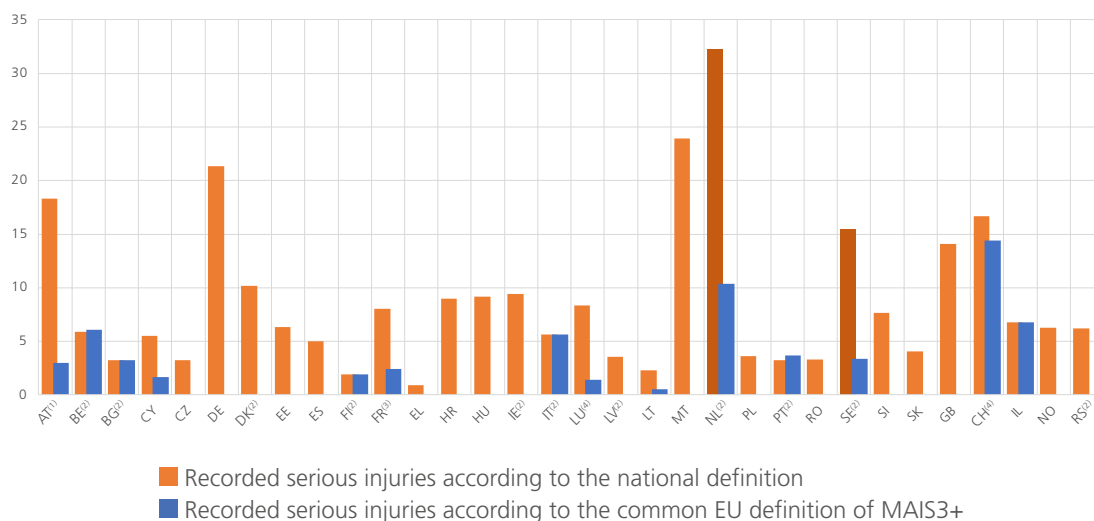
When looking at recorded serious injuries based on national definitions, fewer than one serious injury is registered by the police for every recorded road death in Greece, the ratio is around 32 in the Netherlands, 21 in Germany and 18 in Malta and Austria (Fig.8). The differences in seriously injured per death do not mean that fewer people are injured for every road death in Greece than in the Netherlands, Germany, Malta or Austria but 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. Thus, serious injury numbers are not comparable between countries.

There are around 14 seriously injured people based on MAIS3+ definition for each road death in Switzerland, 10 in the Netherlands, seven in Israel, six in Belgium and Italy, four in Portugal, three in Sweden, Bulgaria and Austria, two in France, Finland and Cyprus and one in Luxembourg and Lithuania (Fig.8 blue bars). As for serious injury based on police records, the differences in serious injury based on MAIS3+ per death do not necessarily mean that fewer people are injured for every road death in Luxembourg, Finland or Cyprus. 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).

²⁹ Broughton et.al. (2008), Estimating the real number of road accident casualties, Final deliverable D.1.15, SafetyNet, <http://bit.ly/3txp0Dz>. Participating countries: Austria, the Czech Republic, France, Greece, Hungary, the Netherlands, Spain and the UK.

Figure 8.
Number of seriously injured recorded in national statistics per one road death per country in the last three years ranked alphabetically.

Numbers between countries are not comparable. 2019-2021 average or the latest three years available.
(¹)2017-2019,
(²)2018-2020,
(³)2015-2017,
(⁴)2016-2018
SE (dark brown bar) – hospital data. NL (dark brown bar) – MAIS2+, hospital data.



ITALY ITALY HAS ADOPTED THE EU TARGET OF REDUCING THE NUMBER OF SERIOUS TRAFFIC INJURIES BY 50% ACCORDING TO THE MAIS3+ DEFINITION.

In Italy, the classification of serious traffic injuries is done through the database of hospital discharge forms. Injured vehicle occupants are classified under codes E810 to E825, other injured road users are added under the codes E826 to E829. In order to identify people injured in a road collision, codes E810-E819 and E826-E829 are selected.

Injury severity is coded using ICD9-CM or ICD10. Conversion into AIS codes is made using the standard conversion table prepared by the Association for the Advancement of Automotive Medicine (AAAM) and made available by the European Commission in 2015.

Data quality and coverage have gradually improved over time but there are still some differences between regions.

The database of discharge forms and the database of road collisions cannot yet be linked. Combining the two databases would allow important information to be added such as the location of the collision in the hospital database or serious injuries in the police database.

2.4 ANNUAL REDUCTION IN SERIOUS INJURIES STILL BEHIND ROAD DEATH REDUCTION

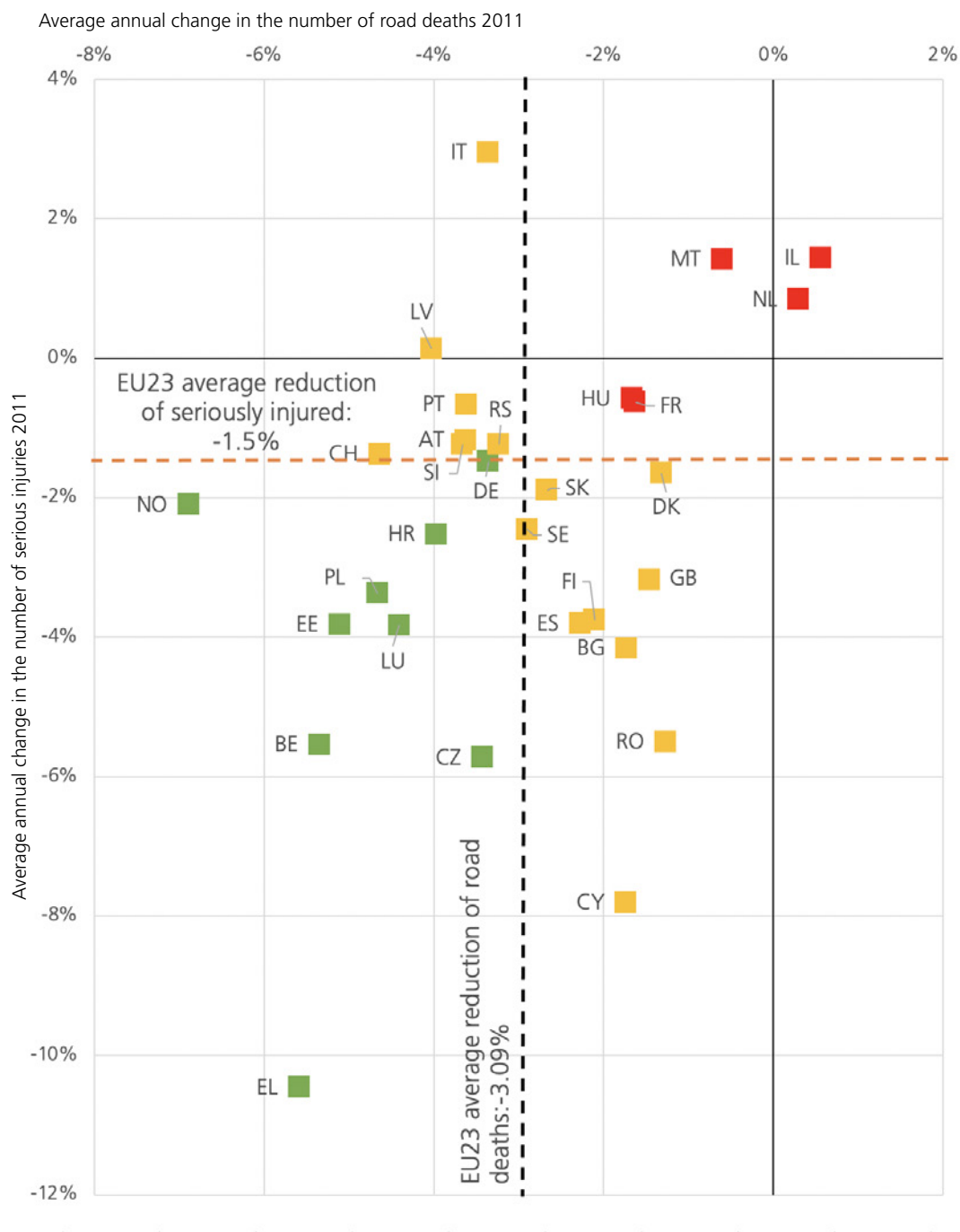
Fig.9 gives an overview of national progress in reducing the numbers of road deaths and the numbers of serious injuries (based on each national definition) over the last ten years. The figure aims to indicate to what extent the two have moved at a similar pace. The average annual change³⁰ in road deaths is plotted on the horizontal axis, and the average annual change in serious injuries on the vertical axis, while the EU averages of -2.9% and -3.8% 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 average in deaths but not in serious injury or vice-versa.

Greece, Norway, Belgium, Czechia, Luxembourg, Estonia, Poland, Croatia and Germany have performed better than the EU average in reducing both serious injuries and road deaths since 2011. The annual reduction rates of serious injuries are also related to reporting rates.

³⁰ The average annual decrease is based on the entire time series of all the nine annual numbers of road deaths between 2011 and 2021, and estimates the average exponential trend. For more information, read the methodological note, PIN Flash 6: [https:// bit.ly/2LVVUTy](https://bit.ly/2LVVUTy)

Figure 9
Estimated average annual change in the number of seriously injured according to the national definition over the period 2011-2021 for countries where data are available, plotted against the estimated average annual change in road deaths over the same period.

The years covered vary: 2011-2020: NO, LU, LV, SE, DK, NL, MT; 2012-2021: EE, AT; 2012-2020: IT, MAIS3+; 2014-2020: FI; 2011-2017: FR; 2012-2021: IL, MAIS3+. EU23: EU27 excluding FI, LT and IE due to an inconsistent trend data FR due to lack of updated data.





RECOMMENDATIONS TO THE NATIONAL GOVERNMENTS

- Set national reduction targets for serious injuries based on MAIS3+ alongside the reduction of deaths in the upcoming road safety strategies.
- Collect serious injury data according to the MAIS3+ definition and continue collecting data based on national definitions.
- Include effects on numbers 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.

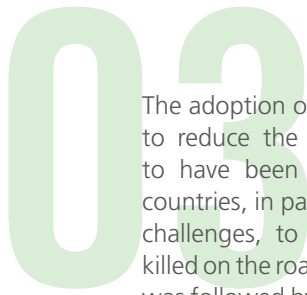
RECOMMENDATIONS TO EU INSTITUTIONS

- Adopt a new joint-EU strategy to tackle serious injuries involving all directorates general in particular DG Health and Food Safety.
- 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.
- Support Member States with an exchange of best practice in MAIS3+ recording procedures and in training of data-handling professionals.
- Continue to review the procedures used by Member States to estimate the number of people seriously injured with a view to achieving comparability even though a variety of methods will be used in practice to implement the common definition.
- Include the numbers 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.
- Adopt a new EU health strategy including road traffic injury prevention measures.

A long-exposure photograph of a city street at night. The image shows a multi-lane road with light trails from cars, primarily in red and white. The street is flanked by modern buildings, including a prominent curved glass structure on the left. The sky is dark with a hint of twilight. The overall scene is illuminated by streetlights and building lights, creating a vibrant urban atmosphere.

PART III

AN OVERVIEW OF EU AND NATIONAL ROAD SAFETY POLICIES



The adoption of the first and second EU targets to reduce the number of road deaths seems to have been a turning point in motivating countries, in particular those facing the greatest challenges, to reduce the number of people killed on the roads. The adoption of these targets was followed by markedly faster progress across the EU than in previous decades. However, the six years of extremely slow progress over the period 2013-2019 signalled an urgent need for renewed action at EU and national level.

3.1 CURRENT EU ROAD SAFETY POLICY DEVELOPMENTS

In May 2018, the European Commission adopted its EU Strategic Action Plan for Road Safety which includes 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 over the same period. It was followed, in June 2019, by the publication of the EU Road Safety Policy Framework 2021-2030, which introduced eight Key Performance Indicators to measure the overall safety performance of EU Member States.³¹

The European Parliament adopted in October 2021, its official response – an “Own Initiative Report” on the EU Road Safety Policy Framework 2021-2030. It sets political priorities and proposes further road safety initiatives at EU and national levels.³² The report, prepared by the Rapporteur Ms. Kountoura MEP, sets out a strong call for action and says EU targets and goals ‘should be underpinned by a coordinated, well-planned, systematic and well-financed road safety approach at EU, national and local level’.³³ There are proposals on taking the EC’s KPI framework forward by ‘setting outcome targets by 2023’. The report includes a strong section on funding, calling for EU and national funds to implement national road safety programmes and the new 2021-2030 EU Road Safety Policy Framework.

New recommendations were adopted by the European Commission in May 2022 to local, regional and national authorities to reduce speeds on motorways and in urban areas.³⁴ The announcement is part of a wide-ranging package of energy saving measures designed to help reduce dependence on Russian oil and gas, and support existing EU policies on climate change. Safety remains a compelling justification for reducing speed. It is a contributing factor in most collisions; reducing average speeds across the EU by just 1% could save 2100 lives a year.³⁵ The European Commission is also recommending incentives for walking, cycling and public transport use, including investments in cycling infrastructure.³⁶

In December 2021, the European Commission proposed new rules governing the Trans-European Transport (TEN-T) networks.³⁷ The most important safety related update is to ensure so-called TEN-T roads meet the standards set out in the 2019/1936 road infrastructure safety management directive. The newly proposed TEN-T regulation sets a timeline for the ‘core network’ to be upgraded to separate carriageways for the two directions of traffic by 2040 with exemptions for roads with low traffic density. Another proposed change is that 424 major cities that are located on major European roads (‘urban nodes’) will be required to produce Sustainable Urban Mobility Plans (SUMP) by 2025 – which should result in improved road safety provisions in cities that haven’t yet put such plans in place. Member States will also have to submit urban mobility data for urban nodes by 2025, and annually after this including collisions, injuries and modal share. Low speed management should be a key part of the SUMP and duly referenced in the TEN-T regulation.³⁸ Active road users also need special protection in the ‘urban nodes’ governed by the TEN-T regulation. The new SUMP obligation and a specific aim to promote an increase in active modes in the proposal will support this.

The European Commission adopted a new Urban Mobility Framework including actions on

³¹ ETSC (2020), MEPs demand action on road safety at first plenary debate with new Transport Commissioner, <https://bit.ly/2U5Io8l>

³² European Parliament, Report on EU Road Safety Policy Framework 2021-2030 – Recommendations on next steps towards “Vision Zero”, <https://bit.ly/3rCE9ld>

³³ Ibid

³⁴ European Commission (2022), Communication EU ‘Save Energy’, <https://bit.ly/3LErqqb>

³⁵ ETSC (2019), PIN Flash 36, Reducing Speeding in Europe, www.etsc.eu/pinflash36

³⁶ European Commission (2022), Communication EU ‘Save Energy’, <https://bit.ly/3LErqqb>

³⁷ European Commission (2021) Proposal for a Regulation on Union guidelines for the development of the trans-European transport network. (COM(2021) 812) <https://bit.ly/3raivUT>

³⁸ ETSC (2022) Road Safety Priorities for the EU in 2022: Memorandum to the French Presidency of the Council of the European Union <https://bit.ly/38EX4X8>

road safety in December 2021.³⁹ The new ‘urban policy initiative’ supports the proposal made in the TEN-T to require cities to adopt SUMP.⁴⁰ The European Commission’s Urban Framework describes the reallocation of public space to sustainable modes but stops short of supporting the stronger call made by the European Parliament in their recent road safety report for this infrastructure to be maintained beyond the Covid-19 crisis.⁴¹

The ‘General Safety Regulation’ adopted in 2019 comprises a number of updated minimum safety requirements for new vehicles, most of which will come into force in July 2022.⁴² The legislation mandates a range of new vehicle safety features such as Automated Emergency Braking (AEB) and overridable Intelligent Speed Assistance (ISA) as standard on new vehicles sold on the EU market. New heavy goods vehicles will also have to be fitted with advanced systems capable of detecting pedestrians and cyclists located in close proximity in July 2022 and comply with improved direct vision requirements as of 2026. Passive safety of cars will also be improved by extending the crash test zone to include the windscreen between the A-pillars for better pedestrian and cyclist protection.

As of 2021, the minimum Infrastructure Safety Management procedures as set by the revised Directive 2019/1936⁴³ have been extended beyond the TEN-T network and will apply to all motorways, all “primary roads” and all non-urban roads that receive EU funding.⁴⁴ EU Member States had until December 2021 to notify the European Commission of the list of motorways and primary roads and exemptions. A European Commission Expert Group is currently developing a new methodology for network-wide risk assessment. This is currently being piloted in

all EU Member States. Member States have until 2024 to ensure that the first network-wide road safety assessment is carried out. EC guidance on quality requirements regarding vulnerable road user safety is also due for development in 2022 within the same Expert Group framework.

Updated rules on driving licences and cross-border enforcement of traffic offences are currently under preparation and are expected at the end of 2022. ETSC has recently published three highly relevant PIN reports with recommendations to feed into these revision processes.⁴⁵

A new report on drink-driving for the European Commission was published in February 2022.⁴⁶ The researchers found that, since 2001, EU guidelines on Blood Alcohol Concentration (BAC) limits were adopted, BAC limits in the EU⁴⁷ have been further harmonised with at least eight countries having introduced a lower BAC level for drivers and fourteen for novice and professional drivers.⁴⁸ The research shows that lowering BAC limits to 0.5 g/L has been effective in reducing road deaths, but it is stressed that the effectiveness is also determined by the level of enforcement and awareness-raising on these limits. The authors also suggest mandatory fitment of alcohol interlocks in heavy goods vehicles. The European Parliament, in its recent report, called on the European Commission to update its BAC recommendations and include a “zero-tolerance drink-driving limit framework”.⁴⁹ The European Parliament’s report also looked at drug driving and suggests that international standards should be developed for drug screening devices along with guidelines for roadside testing and laboratory testing.

³⁹ European Commission (2021), New EU Urban Mobility Framework <https://bit.ly/3raivUT>

⁴⁰ See above and in European Commission (2021) Proposal on Union guidelines for the development of the trans-European transport network. (COM(2021) 812) <https://bit.ly/3raivUT>

⁴¹ The EP “believes that the Commission should do its utmost to ensure that the cycling and walking infrastructure deployed by the Member States as a response to the COVID-19 pandemic remains in place and is expanded in order to further promote safe active travel.” European Parliament, Report on EU Road Safety Policy Framework 2021-2030 – Recommendations on next steps towards “Vision Zero”, <https://bit.ly/3rCE9ld>

⁴² Regulation (EU) 2019/2144 of 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://bit.ly/2CRJWe6>

⁴³ Directive (EU) 2019/1936 on road infrastructure safety management <https://eur-lex.europa.eu/eli/dir/2019/1936/oj>

⁴⁴ ETSC (2019), European Transport Safety Council welcomes deal on safer EU road rules, <https://bit.ly/302foTa>

⁴⁵ ETSC PIN Report Young Road Users <https://bit.ly/3PyZOG9>, Medical Fitness, <https://bit.ly/3sULkXb> and Enforcement, <https://bit.ly/38E6Etn>

⁴⁶ Modijefsky, M; et al. (2022) Prevention of driving under the influence of alcohol and drugs, study for the EC, <https://bit.ly/3yVyQ5x>

⁴⁷ ETSC, Blood Alcohol Content (BAC) Drink Driving Limits across Europe, <https://bit.ly/3aQ0EhF>

⁴⁸ Modijefsky, M; (2022), Prevention of driving under the influence of alcohol and drugs <https://bit.ly/3NtOQQ7> Reported in ETSC News (2022) ‘Report for the European Commission finds benefits of alcohol interlocks for HGVs outweigh costs’ <https://bit.ly/3PEG18c>

⁴⁹ European Parliament, Report on EU Road Safety Policy Framework 2021-2030 – Recommendations on next steps towards “Vision Zero”, <https://bit.ly/3rCE9ld>

RECOMMENDATIONS TO THE EUROPEAN COMMISSION

- Create a new agency to support safe, smart and sustainable transport operations.

Within the context of the EU Road Safety Policy Framework 2021-2030:⁵⁰

- Introduce specific measures to reduce serious injuries, in the light of the new target.
- Develop legislation, where appropriate, instead of unenforceable voluntary commitments.

Following the adoption of the revision of the General Safety Regulation (GSR) on new minimum safety standards for new vehicles:⁵¹

- Deliver on the estimated number of deaths and seriously injured to be prevented by adopting strong secondary legislation implementing the General Safety Regulation.
- Work with Member States to enable the necessary conditions for the functioning of overridable Intelligent Speed Assistance, including regarding the availability of speed limits in a digital format.
- Consider the feasibility and acceptability of non-overridable Intelligent Speed Assistance in the future.

Within the context of the revision of the Cross-Border Enforcement Directive 2015/413:⁵²

- Strengthen the enforcement chain, including mandatory notification of the owner of the vehicle by the country where the offence took place.⁵³

Within the context of the revision of the Driving Licence Directive 2006/126:⁵⁴

- Ensure that the directive remains valid for new technologies and autonomous and semi-autonomous driving.
- Adopt a graduated licensing system that encourages young people to gain more experience while limiting certain high-risk activities such as driving at night and with passengers.⁵⁵

- Develop and promote evidence-based guidelines for family doctors and other medical professionals involved in assessing the functional capabilities of someone suspected of being an unfit driver.⁵⁶
- Allow drivers with alcohol dependency to participate in a rehabilitation programme and be issued with a conditional licence with mandatory use of an alcohol interlock, as long as it is combined with medical supervision.
- Recommend that Member States make wider use of conditional licences (Codes 61 to 69 of Directive 2006/126/EC) where possible.

Within the context of the EU strategy on automated mobility:⁵⁷

- Develop a coherent and comprehensive EU regulatory framework for the safe deployment of automated vehicles.⁵⁸
- Revise type approval standards to cover all the new safety functions of automated vehicles, to the extent that an automated vehicle will pass a comprehensive equivalent to a 'driving test'. This should take into account high-risk scenarios for occupants and road users outside the vehicle.⁵⁹

Following the publication of the new report on drink- and drug-driving for the EC:⁶⁰

- Propose a directive on drink-driving, setting a zero-tolerance level for all drivers.
- Mandate alcohol interlocks for repeat offenders, high-level first time offenders and all professional drivers.
- Introduce an EU zero tolerance system for illicit psychoactive drugs using the lowest limit of quantification that takes account of passive or accidental exposure.
- Adopt common standards for roadside drug-driving enforcement and ensuring that police forces are properly trained in when and how to perform drug screening, field impairment tests and use of roadside screening devices.

⁵⁰ ETSC (2019), Briefing, EU Strategic Action Plan on Road Safety, <https://bit.ly/3iiD3YR>

⁵¹ 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://bit.ly/2CRJWe6>

⁵² Directive (EU) 2015/413 facilitating cross-border exchange of information on road-safety-related traffic offences, <https://goo.gl/iZgQys>

⁵³ ETSC (2022) PIN Flash 42 How Traffic Law Enforcement Can Contribute to Safer Roads, www.etsc.eu/pinflash42

⁵⁴ Directive 2006/126/EC on driving licences, <https://goo.gl/cDJt8i>

⁵⁵ ETSC (2021) PIN Flash 41 Reducing Road Deaths Among Young People, www.etsc.eu/pinflash41

⁵⁶ ETSC (2021), PIN Flash 40, Are medical fitness to drive procedures fit for purpose? www.etsc.eu/pinflash40

⁵⁷ European Commission (17.05.2018), Communication from the European Commission On the road to automated mobility: An EU strategy for mobility of the future, <https://goo.gl/kdqY6V>

⁵⁸ ETSC (2016), Prioritising the Safety Potential of Automated Driving in Europe, <https://goo.gl/TojCUL>

⁵⁹ Ibid

⁶⁰ Modijefsky, M; (2022) Prevention of driving under the influence of alcohol and drugs <https://bit.ly/3NtOQQ7>

3.2 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, nearly all reported having a new road safety strategy either in place or under development for the decade to come (Table 1).

Table 1.
Road safety strategies in the PIN countries.

	New National Road Safety Strategy YES/NO	Time period the new strategy will cover	Road death reduction target	Serious injury reduction target
AT ⁶¹	YES, finalised	2021-2030	50% (2017-2019av.-2030)	50% (2017-2019av.-2030)
BE ⁶²	YES, finalised	2021-2030	50%, less than 320 by 2030	50%, less than 1800 by 2030
BG ⁶³	YES, finalised	2020-2030	50%	50%
CY ⁶⁴	YES, finalised	2021-2030	50% (2019-2030)	50% (2019-2030)
CZ ⁶⁵	YES, finalised	2021-2030	50% (2017-2019av.-2030)	50% (2017-2019av.-2030)
DE ⁶⁶	YES, finalised	2021-2030	40% (2021-2030)	NO
DK	YES, finalised	2021-2030	Max 90 road deaths in 2030	Max 900 seriously injured in 2030
EE	Current	2016-2025	52% (2016-2025)	31% (2016-2025)
EL	Under development	2021-2030	50% (2019-2030)	50% (2019-2030)
ES	Under development	2021-2030	50% (2019-2030)	50% (2019-2030)
FI ⁶⁷	YES, finalised	2022-2026	50% (2020-2030)	50% (2020-2030)
FR	NO		50% (2019-2030)	50% (2019-2030)
HR ⁶⁸	YES, finalised	2021-2030	50% (2019-2030)	50% (2019-2030)
HU	Under development	2023-2025	50% (2020-2030)	50% (2020-2030)
IE	YES, finalised	2021-2030	50% (2017-2019av.-2030)	50% (2017-2019av.-2030)
IT ⁶⁹	YES, finalised	2021-2030	50% (2019-2030)	50% (MAIS3+) (2019-2030)
LU ⁷⁰	Current	2019-2023	NO (Vision Zero)	NO (Vision Zero)
LV ⁷¹	Under development	2021-2027	NO (Vision Zero)	NO (Vision Zero)
LT ⁷²	YES, finalised	2020-2030	50% (2019-2030)	50%
MT	Current	2014-2024	NO	NO
NL ⁷³	Activity Plans finalised	2018-2030	NO	NO
PL ⁷⁴	YES, finalised	2021-2030	50% (2019-2030)	50% (2019-2030)
PT ⁷⁵	Under development	2020-2030	50%	50%
RO	Under development	n/a	NO	NO
SE	Management by objectives	2020-2030	50% (2017-2019av.-2030)	25% (2017-2019av.-2030)
SI ⁷⁶	Current	2013-2022	50% (2011-2020)	50% (2011-2020)
SK ⁷⁷	YES, finalised	2021-2030	50% (2021-2030)	50% (2021-2030)
UK ⁷⁸	Under development	n/a	NO	NO
CH	Current	No time limit	Max 100 road deaths by 2030	Max 2,500 serious injuries by 2030
IL ⁷⁹	YES, finalised	2020-2030	50% (2021-2030)	50% (2021-2030)
NO ⁸⁰	Current	2018-2021	Max 50 deaths by 2030	Max. 350 deaths and serious injuries by 2030
RS	Under development	2022-2030	50% (2019-2030)	50% (2019-2030)

⁶¹ Austrian Road Safety Strategy 2021-2030, <https://bit.ly/3ys7rlg>

⁶² All For Zero, <https://bit.ly/3N5FUQM>

⁶³ The National Strategy for Road Safety until 2030 has been adopted - State Agency for Road Safety <https://bit.ly/37zu96e>

⁶⁴ Στρατηγικό Σχέδιο, <https://bit.ly/3alx6s9>

⁶⁵ Czech Road Traffic Safety Strategy 2021-2030, <https://bit.ly/3MYCAa0>

⁶⁶ Deutscher Bundestag, Verkehrssicherheitsprogramm der Bundesregierung 2021 bis 2030, <https://bit.ly/3FuVCCA>

⁶⁷ Government resolution: Transport Safety Strategy aims to improve the safety of all modes of transport – Ministry of Transport and Communications <https://bit.ly/39Uw5XT>

⁶⁸ Odluka o donošenju Nacionalnog plana sigurnosti cestovnog prometa Republike Hrvatske za razdoblje od 2021. do 2030. <https://bit.ly/3N3ginD>

⁶⁹ Piano Nazionale Sicurezza Stradale 2030, <https://bit.ly/3kUByJf>

⁷⁰ Plan d'action « sécurité routière » (2019–2023), <https://bit.ly/3vMmkkh>

⁷¹ Satiksmes ministrija, Ceļu satiksmes drošības plāns 2021.–2027. gadam, <https://bit.ly/3g3t3Qp>

⁷² Lietuvos Respublikos Vyriausybė (2020), Nutarimas dėl valstybinės eismo saugos programos „Vizija-nulis“ patvirtinimo, <https://bit.ly/34FqaQx>

⁷³ Veilig van deur tot deur, <https://bit.ly/38masPv>

⁷⁴ NARODOWY PROGRAM BEZPIECZEŃSTWA RUCHU DROGOWEGO 2021 - 2030, <https://bit.ly/3N35ohJ>

⁷⁵ Estratégia Nacional de Segurança Rodoviária 2021 / 2030, <https://visaozero2030.pt/>

⁷⁶ Resolucija o nacionalnem programu varnosti cestnega prometa za obdobje od 2013 do 2022 (ReNPVCP13-22), <https://bit.ly/2SQOs7l>

⁷⁷ Bezpečnosť cestnej premávky, <https://bit.ly/3wfe4uJ>

⁷⁸ Department for Transport, The Road Safety Statement 2019, A Lifetime of Road Safety, <https://bit.ly/3yVeVkk>

⁷⁹ מידע 30 מסיכורב תחזיתב תימואל תינוכת <https://bit.ly/3stGW19>

⁸⁰ Meld. St. 20 (2020–2021), Melding til Stortinget Nasjonal transportplan 2022–2033, <https://bit.ly/2TuDLrm>



AUSTRIA

NEW ROAD SAFETY STRATEGY FOR THE PERIOD 2021-2030

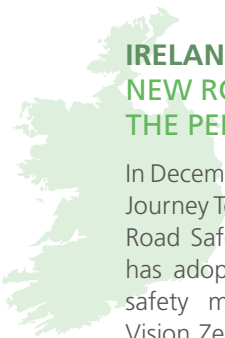
In 2021 the Austrian Government published a new Road Safety Strategy for the period 2021-2030. The Strategy, for the first time, has numerous targets on SPIs. The SPIs cover the 8 indicators introduced in the EU's Road Safety Policy Framework 2021-2030, as well as additional indicators on topics such as attitudes towards risky behaviour and the use of protective clothing on motorcycles. Moreover, the Strategy includes Vision Zero for child deaths.



THE NETHERLANDS

GRADUALLY REDUCING DEATHS TO ZERO BY 2050

The Netherlands has chosen not to set a fixed target for the upcoming years until 2030 but aims instead to gradually reduce deaths to zero by 2050. In order to reach the target, the Netherlands has published a Strategic Road Safety Plan 2030 (SRSP2030) and a National Action Plan Road Safety (LAP) for the period 2022-2025. The main themes of the new strategy are safe infrastructure, vulnerable road users, safe vehicles and driver assistance, safe behaviour and driving under the influence of alcohol and illegal substances.



IRELAND

NEW ROAD SAFETY STRATEGY FOR THE PERIOD 2021-2030

In December 2021, the government launched 'Our Journey Towards Vision Zero, Ireland's Government Road Safety Strategy 2021-2030'.⁸¹ The strategy has adopted the Safe System approach to road safety management. Guiding this strategy is Vision Zero, Ireland's long-term goal of achieving zero road deaths or serious injuries by 2050.

The Phase 1 Action Plan (2021-2024)⁸² which has been published alongside the ten-year strategy document, contains 50 "high-impact" actions, such as:

- Establish a working group to examine and review the framework for the setting of speed limits. As part of this review there will be a specific consideration of the introduction of a 30km/h default speed limit in urban areas.

- Expand speed management measures on National, Regional and Local roads using Periodic Speed Limits at schools, Vehicle Activated Signs and Average Speed Cameras in collaboration with police at appropriate high-risk locations.
- Review the penalties for serious road traffic offences including the following: impaired driving, speeding, mobile phone use, non-wearing of seat belts, carrying unrestrained children in a vehicle.
- Over the period 2021 to 2025, 1,000km of segregated walking and cycling facilities will be constructed or under construction on the national, local, and regional road network, to provide safe cycling and walking arrangements for users of all ages.



SERBIA

WORKING ON A NEW ROAD SAFETY STRATEGY 2022-2030 TO BE AMONG THE 10 SAFEST COUNTRIES IN EUROPE

Serbia is preparing a new Road Safety Strategy 2022-2030 as well as an Action Plan 2022-2024. The Road Traffic Agency has formed a Working Group to help prepare the Road Safety Strategy, which includes representatives of 32 road safety stakeholders at the national and local level.

The ambition for Serbia is to be among the 10 safest countries in Europe, in terms of road deaths per million inhabitants. Among the measures foreseen are:

- setting up the Road Traffic Safety Agency as the national leading agency for road safety;
- establishing a national road safety fund;
- establishing an integrated and sustainable system of traffic safety and mobility education at all levels of education;
- improving the planning, design, construction and maintenance of roads, so that at least 75% of travel is performed on roads with high standards of road safety, in accordance with the safe system approach and the requirements of automated vehicles.
- improving post-crash response by implementing e-Call.

A total of 31 measures and 250 activities has been defined.

⁸¹ 'Our Journey Towards Vision Zero, Ireland's Government Road Safety Strategy 2021-2030, <https://bit.ly/3m8G8ey>

⁸² Action Plan 2021-2024, <https://bit.ly/3NjRMil>



ITALY

NEW NATIONAL ROAD SAFETY PLAN 2030 TO IMPROVE ROAD SAFETY ACCORDING TO THE “SAFE SYSTEM” APPROACH

In April 2022, Italy adopted its “National Road Safety Plan 2030” (NRSP 2030), aligned with the EU targets of reducing road deaths and serious injuries by 50% by 2030. The main actions to be implemented have been chosen in order to improve road safety according to the “Safe System” approach.

The plan has been divided into three phases and will be developed through five implementation programmes. Each programme will define legislative actions, measures to strengthen enforcement, interventions to improve the safety of road infrastructure and communication and awareness campaigns. Action will be taken by central administrations, local administrations responsible for targeted interventions on the territories and also, in some cases, the private sector.

A monitoring system has been set up to help evaluate whether adjustments to the measures implemented in the NRSP 2030 might be needed. This system is based on the definition and collection of four types of indicators: risk exposure indicators (vehicle-km); process indicators (progress of interventions); safety performance indicators that describe the safety level of the different parts of the road traffic system; and impact indicators (collisions, injuries and deaths).

Financial support will be also foreseen for specific investments in road safety measures to be allocated in implementing Programmes of the NRSP. Other investments on road infrastructure safety have been allocated in the decade 2021-2030: national road network 7.5 billion euros, regional and provincial road network 8.7 billion euros, upgrading and maintaining roads, and cycling mobility 1.163 billion euros. 3,2 billion euros are also foreseen by the Budget Law and by the National Recovery and Resilience Plan for innovative and sustainable mobility, especially in urban centers. The latter will focus on the development of new services that, thanks to digital technologies, will drive safer, more environmentally friendly and innovative mobility.



POLAND

A NEW NATIONAL ROAD SAFETY PROGRAMME 2021-2030 AND A SAFE ROAD INFRASTRUCTURE PROGRAMME 2021-2024

Poland launched a new National Road Safety Programme for the period 2021-2030 aligned with the EU 2030 targets. The programme is based on five pillars which are main areas of intervention to improve road safety by 2030: 1. Road safety management system, 2. Safe road user, 3. Safe roads, 4. Safe vehicle, 5. Emergency and post-crash care. For each pillar there are priorities and course of actions developed. A Safe Road Infrastructure Programme 2021-2024 has also been developed by the Ministry of Infrastructure and aims to improve road safety on national roads. It is the first independent multi-annual programme for road safety infrastructure with a dedicated budget of more than 540 million EUR. Within 2019-2021, the National Road Safety Council has organised training courses for local road authorities on the use of engineering measures to improve the safety of road users.



SPAIN

NEW ROAD SAFETY 2030, AIMING TO AMEND THE GENERAL REGULATIONS ON ROAD TRAFFIC

The Strategy on Road Safety 2030 is a national strategy and acts in a cross-cutting and comprehensive manner on road users, infrastructure and the environment, vehicles and post-collision response through legislation, education and training, monitoring, technology and improved data and governance.

Some of the most promising measures currently addressed are to amend the General Regulations on Road Traffic with a view to improving, among others, the protection of vulnerable groups, integrate road safety into the school curriculum, and regulate courses on safe efficient driving aimed at motorcyclists.



NORWAY LEADING COUNTRY IN EUROPE WITH A 52% ROAD DEATHS REDUCTION SINCE 2011 AND A NEW NATIONAL TRANSPORT PLAN FOR THE PERIOD 2022-2033

The number of road deaths in Norway was reduced by 26% between 2019 and 2021 and by 52% between 2011 and 2021. In 2022, Norway published a new National Transport Plan for the period 2022-2033. The Plan includes an ambition to reduce the number of deaths and serious injuries in road traffic to a maximum of 350 by 2030, of which no more than 50 shall be deaths. This means a 50% reduction compared to current levels. The long-term ambition is that there will be zero deaths in road traffic in 2050. Other ambitions included in the Plan are:

- ensure that, by 2028, 60% of traffic on national roads with a speed limit of 70km/h or higher takes place on roads with median barriers, and that all national roads with a speed limit of 70km/h or higher will eventually meet a minimum standard for run-off-the-road collisions
- place particular emphasis on the needs of pedestrians, cyclists, and motorcyclists in the design, construction, operation and maintenance of roads - ensure that children can be safe in traffic, for instance by securing roads near schools, in local communities and other infrastructure, traffic and mobility training and information campaigns
- earmark €50 million in the first six years for measures that improve road safety for children and young people, including establishing a grant scheme to encourage local efforts for safe roads near schools and in local communities.

3.3 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 in the coming decade. The KPIs were further detailed in the EU Strategic Action Plan on Road Safety.⁸³

In an initial phase, eight have been chosen which will form the basis for monitoring progress in joint road safety work at EU, Member State, regional and local level. The EC will analyse the data together with Member State experts and report on it as of 2021. The aim is to continue strengthening the existing KPIs and to develop additional ones.⁸⁴ 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:

- Percentage of vehicles travelling within the speed limit
- Percentage of vehicle occupants using the safety belt or child restraint system correctly
- Percentage of riders of powered-two-wheelers and bicycles wearing helmets
- Percentage of drivers driving within the legal limit for blood alcohol content (BAC)
- Percentage of drivers not using a handheld mobile device
- Percentage of new passenger cars with a Euro NCAP safety ranking equal or above a predefined threshold
- Percentage of distance driven over roads with a safety rating above an agreed threshold
- 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.

⁸³ ETSC (2019), Briefing EU Strategic Action Plan on Road Safety, <https://bit.ly/36Ua5Xe>

⁸⁴ Ibid

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 detect the emergence of problems at an earlier stage.⁸⁵

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 participating Member States. Each participating country will provide between one and eight national KPI values that are comparable across countries and meet the minimum methodological requirements of the European Commission.⁸⁶ Participating Member States are indicated in Table 2.

There is some way to go in terms of developing some of these KPIs, collecting the data and setting KPI targets (Tables 2 and 3). The KPIs on safety belts seems the most advanced, with 30 PIN countries reporting they collect or are planning 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.

Until now, countries have been applying different methodologies to collecting KPI data. The level of detail of each KPI and the frequency of how often KPI data are collected differ between countries.

RECOMMENDATION TO NATIONAL GOVERNMENTS ON NATIONAL ROAD SAFETY STRATEGIES AND KPIs

- In EU Member States, 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 as soon as possible the necessary budget to continue collecting data.

RECOMMENDATION TO THE EUROPEAN COMMISSION ON 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 Results conference.
- Extend and improve the current KPIs taking account of ETSC recommendations.⁸⁷
- Support Member States in collecting harmonised data.

⁸⁵ ETSC (2018) Briefing: 5th EU Road Safety Action Programme 2020-2030, <https://bit.ly/2LuTDBW>

⁸⁶ Baseline project, <https://baseline.vias.be/>

⁸⁷ ETSC (2019), Briefing: EU Strategic Action Plan on Road Safety, <https://bit.ly/3ihmcW7>

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

Green = the KPI data are being collected or will be collected in the near future, red = the KPI data are not being collected, orange = under discussion and n/a = the information was not available at the time of going to press.

	BASELINE 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	n/a	YES	n/a	YES	n/a	YES	n/a
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	NO	NO
DK	NO	YES	NO	YES	NO	YES	NO	NO	n/a
EE	NO	YES	YES	YES	YES	YES (bicycle)	YES	YES	YES
ES	YES	YES	tbd	YES	tbd	YES	tbd	YES	tbd
EL	YES	YES	YES	YES	YES	YES	YES	YES	YES
FI	YES	YES	tbd	YES	tbd	YES	tbd	YES	tbd
FR	NO	YES	n/a	YES	n/a	YES	n/a	YES	n/a
HR	NO	YES	n/a	YES	n/a	YES	n/a	YES	n/a
HU	NO	NO	NO	YES	NO	YES	NO	YES	NO
IE	YES	YES	tbd	YES	tbd	YES	tbd	YES	tbd
IT	NO	NO	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	YES	YES	tbd	NO	n/a	YES	tbd	NO	n/a
NL	YES	YES	tbd	YES	YES	NO	n/a	YES	n/a
PL	YES	YES	NO	YES	NO	YES	NO	YES	NO
PT	YES	YES	n/a	YES	n/a	YES	n/a	YES	n/a
RO	NO	NO	NO	NO	NO	NO	NO	NO	NO
SE	YES	YES	YES (tbd)	YES	YES (tbd)	YES	YES (tbd)	YES	YES (tbd)
SI	NO	YES	YES	YES	YES	YES (bicycle)	NO	YES	YES
SK	NO	NO	n/a	NO	n/a	NO	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	Not applicable	YES	NO	YES	NO	YES	NO	YES (tbd)	n/a
IL	Not applicable	YES	YES (tbd)	YES	YES (tbd)	NO	YES (tbd)	YES	YES (tbd)
NO	Not applicable	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.
Green = the KPI
data are being
collected or will
be collected in
the near future,
red = the KPI data
are not being
collected,
orange = under
discussion and
n/a = the
information was
not available at
the time of going
to press.

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

PART IV

LITHUANIA: WINNER OF THE 2022 ROAD SAFETY PIN AWARD



LITHUANIA

WINNER OF THE 2022

ROAD SAFETY PIN AWARD

INTERVIEW WITH MARIUS SKUODIS, LITHUANIAN MINISTER OF
TRANSPORT AND COMMUNICATIONS



Lithuania previously won the PIN Award in 2011. According to you, which measures yielded the best road safety results over the period 2011-2021?

There was probably no silver bullet, since road safety depends on a number of different factors. What, however, has been especially important, is a joint effort by both state institutions and society. From the state's side I would distinguish regular road safety engineering investigations, improvement of unsafe road infrastructure and engineering traffic safety measures on roads and streets as well as active control of road users. It is also important to regularly update the legislation related to traffic safety.

The National Road Traffic Safety Programme was adopted in 2020. What are the main priorities and objectives of the programme? How does it respond to the European Commission's Road Safety Policy Framework 2021-2030 and its Key Performance Indicators?

The vision of the programme is to have zero deaths on Lithuanian roads by 2050. In the medium term, our goal is to reduce the number of fatalities and serious injuries by at least 50% before 2030, as compared to 2019. That would mean no more than 75 road deaths or no more than 25 deaths per million inhabitants. Over the same timespan, we will focus our attention on the development of infrastructure for self-driving vehicles, cyber security, and mitigation of the consequences of traffic collisions.

Cities like Kaunas (a finalist for the EU SUMP Award) and Vilnius are increasingly taking action on road safety. How does the government engage with municipalities on road safety development in Lithuania?

A number of Lithuanian cities have made significant progress with the preparation and implementation of sustainable mobility plans. Many municipalities have set clear future goals in the field of mobility and traffic safety, and we are constantly encouraging them in this respect, as well as contributing financially.

Speed is a major factor in overall road safety performance. ETSC data shows that the number of speeding tickets issued in Lithuania has increased significantly over the last decade. What is Lithuania doing to reduce speeding?

Lithuania is no exception compared to other European

Union Member States. We seek to manage the risk of collisions by active speed control measures. The police, who actively carry out speed controls, have also made a significant contribution. In addition, four years ago, we started to install time-over-distance cameras on roads (despite the fact that they are not always popular among drivers). However, our main priority remains safe infrastructure that naturally ensures proper and safe driving speeds.

Despite halving the number of collisions caused by drivers under the influence of alcohol between 2004 and 2015, 2020 saw an increase of 12%. How is Lithuania tackling the problem of drink-driving/drug-driving?

Lithuania has chosen two solutions to reduce the number of drink-drivers: stricter responsibility for drink-driving and stronger control of driver sobriety. A lot of attention has also been paid to educational activities. In 2019, new amendments to the Lithuanian Criminal Code and the Lithuanian Code of Administrative Offences were adopted, which tightened the responsibility for drivers under the influence of alcohol or drugs as well as for dangerous and hooligan driving.

Seatbelt wearing rates for rear passengers are still low in Lithuania. What is the government doing to address this?

According to the latest studies, in 2021, about 95% of car drivers in Lithuania were wearing seatbelts. However, seatbelts were worn by only around 62% of rear seat passengers. We therefore need to do more to improve this.

Many countries have noticed an increase in active mobility since the COVID-19 pandemic. Is this also the case in Lithuania? How is the safety of pedestrians and cyclists being addressed in Lithuania?

The COVID-19 pandemic has changed the balance in mobility. We can say that the pandemic has promoted the mobility of cyclists and increased the activity of cycling. We are delighted that society is increasingly opting for greener mobility. But bearing in mind that, since 2018, the number of cyclists and scooter riders involved in road collisions has increased by 39%, we are currently preparing new rules for the design of bicycle paths. We see the necessity to further improve the relevant infrastructure.

Lithuania is participating in the EU Road Safety Exchange project financed by the European Parliament, managed by the European Commission and implemented by ETSC. What has been most useful and which ideas from the partner countries could be implemented in Lithuania as regards cycling and data collection?

The EU Road Safety Exchange project has been useful for helping us find the most effective measures for improving the safety of vulnerable road users. As cycling has a huge influence on the environment, health, and safety, Lithuania is now giving particular attention to this topic. As a result of our participation in this project, especially as regards cycling safety, we have expanded our activity in this area. The main change is that we have started a large-scale cycling promotion project in Lithuania.

Road mortality (deaths per million inhabitants) in Lithuania is still above the EU average. What are the key road safety challenges that Lithuania faces today? How are you planning to address them in the short term?

We need to understand that this is a complex problem, which depends to a large extent on the behaviour of road users. When analysing traffic collisions, we can see that speeding and alcohol remain the main reasons. The emphasis must therefore be placed on the education of road users and, of course, on prevention.

What will be the expected impact and road safety benefits of the implementation of the EU Road Infrastructure Safety Management Directive and application of the new requirements in Lithuania?

In 2021-2022, Lithuania substantially updated the legal regulation on traffic safety management and fully transposed the provisions of the Directive. We have appointed the responsible authority for traffic safety management – the Transport Competence Agency. It will carry out targeted activities in the field of traffic safety and ensure the effective application of traffic safety procedures. As early as this year we will launch training for road safety auditors, examinations, and issuance of certificates. Together with all the EU countries, we will also carry out a pilot project for the evaluation of the entire road network.

ANNEXES

COUNTRY	ISO CODE
Austria	AT
Belgium	BE
Bulgaria	BG
Croatia	HR
Cyprus	CY
The Czech Republic	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. 3, 4, 9) Road deaths and relative change in road deaths between 2011 and 2021 and between 2019 and 2021.

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
AT	523	531	455	430	479	432	414	409	416	344	362
BE ⁽¹⁾	884	827	764	745	762	670	609	604	646	484	484
BG	657	601	601	660	708	708	682	611	628	463	561
CY	71	51	44	45	57	46	53	49	52	48	45
CZ ⁽¹⁾	773	742	654	688	737	611	577	658	617	517	531
DE ⁽¹⁾	4,009	3,601	3,340	3,368	3,459	3,206	3,177	3,275	3,059	2,719	2,569
DK ⁽¹⁾	220	167	191	183	178	211	183	175	199	155	135
EE	101	87	81	78	67	71	48	67	52	60	55
ES ⁽¹⁾	2,060	1,903	1,680	1,688	1,689	1,810	1,830	1,806	1,755	1,370	1,508
FI ⁽¹⁾	292	255	258	229	270	258	238	239	211	221	223
FR ⁽¹⁾	3,963	3,653	3,268	3,384	3,461	3,477	3,448	3,248	3,244	2,541	2,947
EL	1,141	988	879	795	793	824	731	700	688	584	608
HR	418	393	368	308	348	307	331	317	297	237	292
HU ⁽¹⁾	638	605	591	626	644	607	625	633	602	460	544
IE ⁽¹⁾	186	163	188	192	162	182	154	135	140	147	137
IT ⁽¹⁾	3,860	3,753	3,401	3,381	3,428	3,283	3,378	3,334	3,173	2,395	2,843
LU ⁽¹⁾	33	34	45	35	36	32	25	36	22	26	24
LV ⁽¹⁾	179	177	179	212	188	158	136	148	132	139	147
LT ⁽¹⁾	297	302	258	267	242	192	192	173	186	175	147
MT	17	9	18	10	11	22	19	18	16	12	9
NL	661	650	570	570	620	629	613	678	661	610	582
PL	4,189	3,571	3,357	3,202	2,938	3,026	2,831	2,862	2,909	2,491	2,245
PT ⁽¹⁾	891	718	637	638	593	563	602	675	626	509	514
RO	2,018	2,042	1,861	1,818	1,893	1,913	1,951	1,867	1,864	1,646	1,779
SE ⁽¹⁾	319	285	260	270	259	270	253	324	221	204	192
SI	141	130	125	108	120	130	104	91	102	80	114
SK	324	296	223	259	274	242	250	229	245	224	226
UK ⁽²⁾	1,960	1,802	1,770	1,854	1,804	1,860	1,856	1,839	1,808	1,516	1,610
CH	320	339	269	243	253	216	230	233	187	227	200
IL	382	290	309	319	356	377	364	316	355	305	364
NO	168	145	187	147	117	135	106	108	108	93	80
RS	731	688	650	536	599	607	579	548	534	492	521
EU 27	28,865	26,534	24,296	24,189	24,416	23,880	23,454	23,361	22,763	18,861	19,823

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

⁽¹⁾ provisional data

⁽²⁾ 2021 estimate is based on GB provisional total for the year 2021 and the provisional data for Northern Ireland for the calendar year 2021

⁽³⁾ The average annual change is based on the entire time series of all the ten annual numbers of road deaths between 2011 and 2021, and estimates the average exponential trend. For more information, read the methodological note, PIN Flash 6: <https://bit.ly2LvvUty>

Fig. 3 2011-2021	
NO	-52.4%
LT ⁽¹⁾	-50.5%
MT	-47.1%
EL	-46.7%
PL	-46.4%
EE	-45.5%
BE ⁽¹⁾	-45.2%
PT ⁽¹⁾	-42.3%
SE ⁽¹⁾	-39.8%
DK ⁽¹⁾	-38.6%
CH	-37.5%
CY	-36.6%
DE ⁽¹⁾	-35.9%
CZ ⁽¹⁾	-31.3%
AT	-30.8%
SK	-30.2%
HR	-30.1%
RS	-28.7%
LU ⁽¹⁾	-27.3%
ES ⁽¹⁾	-26.8%
IT ⁽¹⁾	-26.3%
IE ⁽¹⁾	-26.3%
FR ⁽¹⁾	-25.6%
FI ⁽¹⁾	-23.6%
SI	-19.1%
LV ⁽¹⁾	-17.9%
UK ⁽²⁾	-17.9%
HU ⁽¹⁾	-14.7%
BG	-14.6%
NL	-12.0%
RO	-11.8%
IL	-4.7%
EU 27	-31.3%

Fig. 4 2019-2021	
MT	-43.8%
DK ⁽¹⁾	-32.2%
NO	-25.9%
BE ⁽¹⁾	-25.1%
PL	-22.8%
LT ⁽¹⁾	-21.0%
PT ⁽¹⁾	-17.9%
DE ⁽¹⁾	-16.0%
ES ⁽¹⁾	-14.1%
CZ ⁽¹⁾	-13.9%
CY	-13.5%
SE ⁽¹⁾	-13.1%
AT	-13.0%
NL	-12.0%
EL	-11.6%
UK ⁽²⁾	-11.0%
BG	-10.7%
IT ⁽¹⁾	-10.4%
HU ⁽¹⁾	-9.6%
FR ⁽¹⁾	-9.2%
SK	-7.8%
RO	-4.6%
RS	-2.4%
IE ⁽¹⁾	-2.1%
HR	-1.7%
IL	2.5%
FI ⁽¹⁾	5.7%
EE	5.8%
CH	7.0%
LU ⁽¹⁾	9.1%
LV ⁽¹⁾	11.4%
SI	11.8%
EU27	-12.9%

Fig. 9 Annual average change in the number of road deaths 2011-2021 ⁽³⁾		
NO	-6.9%	
EL	-5.6%	
BE	-5.3%	
EE	-5.1%	2012-2021
PL	-4.7%	
CH	-4.6%	
LU	-4.4%	2011-2020
LV	-4.0%	2011-2020
HR	-4.0%	
SI	-3.7%	
AT	-3.6%	2012-2021
PT	-3.6%	
CZ	-3.4%	
IT	-3.4%	2012-2020
DE	-3.4%	
RS	-3.2%	
SE	-2.9%	2011-2020
SK	-2.7%	
ES	-2.3%	
FI	-2.1%	2014-2020
CY	-1.7%	
BG	-1.7%	
HU	-1.7%	
FR	-1.6%	2011-2017
GB	-1.5%	
DK	-1.3%	2011-2020
RO	-1.3%	
MT	-0.6%	
NL	0.3%	2011-2020
IL	0.6%	2013-2021
EU23	-3.1%	
IE	Excluded from Fig. 9	
LT	Excluded from Fig. 9	
UK	Excluded from Fig. 9	

Table 2 (Fig. 5) Road deaths per million inhabitants in 2021 and 2011.

	2021		
	Road deaths	Inhabitants	Deaths per mln inhabitants
NO	80	5,391,369	14.8
MT	9	516,100	17.4
SE ⁽¹⁾	192	10,379,295	18.5
CH	200	8,667,088	23.1
DK ⁽¹⁾	135	5,840,045	23.1
UK ⁽⁴⁾	1,610	67,350,695	23.9
IE ⁽¹⁾	137	5,006,907	27.4
DE ⁽¹⁾	2,569	83,155,031	30.9
ES ⁽¹⁾	1,508	47,394,223	31.8
NL	582	17,475,415	33.3
LU ⁽¹⁾	24	634,730	37.8
IL	364	9,449,000	38.5
FI ⁽¹⁾	223	5,533,793	40.3
AT ⁽¹⁾	362	8,932,664	40.5
EE	55	1,330,068	41.4
SK	226	5,459,781	41.4
BE ⁽¹⁾	484	11,566,041	41.8
FR ⁽²⁾	2,947	65,447,454	45.0
IT ⁽¹⁾	2,843	59,257,566	48.0
CZ ⁽¹⁾	531	10,701,777	49.6
CY	45	896,005	50.2
PT ⁽³⁾	514	9,857,593	52.1
LT ⁽¹⁾	147	2,795,680	52.6
SI	114	2,108,977	54.1
HU ⁽¹⁾	544	9,730,772	55.9
EL	608	10,682,547	56.9
PL	2,245	37,840,001	59.3
HR	292	4,036,355	72.3
RS	521	6,871,547	75.82
LV ⁽¹⁾	147	1,893,223	77.6
BG	561	6,916,548	81.1
RO	1,779	19,186,201	92.7
EU 27	19,823	444,574,792	44.6

	2011		
	Road deaths	Inhabitants	Deaths per mln inhabitants
NO	168	4,858,199	34.6
MT	17	414,989	41.0
SE ⁽¹⁾	319	9,415,570	33.9
CH	320	7,870,134	40.7
DK ⁽¹⁾	220	5,560,628	39.6
UK ⁽⁴⁾	1,960	63,022,532	31
IE ⁽¹⁾	186	4,570,881	40.7
DE ⁽¹⁾	4,009	80,222,065	50.0
ES ⁽¹⁾	2,060	46,667,174	44.1
NL	661	16,655,799	39.7
LU ⁽¹⁾	33	511,840	64.5
IL	382	7,836,592	48.7
FI ⁽¹⁾	292	5,375,276	54.3
AT ⁽¹⁾	523	8,375,164	62.4
EE	101	1,329,660	76.0
SK	324	5,392,446	60.1
BE ⁽¹⁾	884	11,000,638	80.4
FR ⁽²⁾	3,963	63,070,344	62.8
IT ⁽¹⁾	3,860	59,364,690	65.0
CZ ⁽¹⁾	773	10,486,731	73.7
CY	71	839,751	84.5
PT ⁽³⁾	891	10,572,721	84.3
LT ⁽¹⁾	297	3,052,588	97.3
SI	141	2,050,189	68.8
HU ⁽¹⁾	638	9,985,722	63.9
EL	1,141	11,123,392	102.6
PL	4,189	38,062,718	110.1
HR	418	4,289,857	97.4
RS	731	7,251,549	100.81
LV ⁽¹⁾	179	2,074,605	86.3
BG	657	7,369,431	89.2
RO	2,018	20,199,059	99.9
EU 27	28,866	438,033,928	65.9

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

⁽¹⁾ National provisional estimates used for 2021, as the final figures for 2021 were not yet available when this report went to print

⁽²⁾ FR: continental population data

⁽³⁾ PT: continental population estimate. 2021 road deaths and continental population data provided by the National Road Safety Authority (ANSR)

⁽⁴⁾ UK: 2021 estimate is based on GB provisional total for the year 2021 and the provisional data for Northern Ireland for the calendar year 2021, population data is an estimate for the year 2021

Table 3 (Fig. 6) Road deaths per billion vehicle-kilometres over three recent years.

	Road deaths (3-year average)	Vehicle-km in million (3-year average) ⁽¹⁾	Deaths per billion vh-km (3-year average)	Time period covered
NO	94	45,062	2.08	
SE	206	80,819	2.54	
GB ⁽³⁾	1,591	520,780	3.05	
CH	216	66,945	3.22	
IE	141	43,618	3.22	2018-2020
DK	163	50,467	3.23	
DE	2,782	704,667	3.95	
SK	232	58,400	3.97	2018-2020
SI	91	21,535	4.23	
FI	218	49,078	4.45	
EE	56	11,493	4.84	2018-2020
AT	390	80,161	4.86	2018-2020
NL	650	131,318	4.95	2018-2020
FR	3,011	582,235	5.17	2018-2020
IL	325	59,836	5.44	2018-2020
IT	2,804	506,308	5.54	2018-2020
MT	15	2,266	6.77	
PT	545	68,229	7.99	2018-2020
CZ ⁽²⁾	597	55,405	9.38	
HR	275	25,781	10.68	
LV	139	9,471	14.71	2018-2020
EU19	12,844	2,507,137	5.12	2018-2020
LT	169	12,600	13.44	
HU	620	44,619	13.90	2017-2019
ES	1,797	230,577	7.79	2017-2019
PL	2,754	241,464	11.41	2017-2019
BE	n/a			
BG	n/a			
CY	n/a			
EL	n/a			
LU	n/a			
RO	n/a			
RS	n/a			
UK	n/a			

EU17 average: EU27 excluding BE, BG, CY, EL, ES, LU, PL and RO due to lack of data on vehicle-km, LT and HU are excluded as data on vehicle-km is available on part of the road network only.

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

⁽²⁾CZ: data on the number of vehicle-km is estimated by traffic counting for motorways and roads of 1st, 2nd and 3rd class category where 87% of all road deaths occur. Local roads where 17% of all road deaths occur are not counted. Therefore, the number of road deaths per vehicle-km is calculated for 83% of all road deaths.

⁽³⁾GB: data for 2021 are an estimate based on data for Jan-Sep 2021 and Oct-Dec 2019

Table 4 (Fig. 7, 8, 9)

Number of seriously injured according to national definition (see table 6 for definition) and MAIS3+, relative change in serious injuries between 2011-2021 and annual average relative change over the period 2011-2021.

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
AT ^{(2)*}	6,397	8,017	7,344	7,434	7,486	7,566	7,664	7,631	7,384	6,650	6,945
AT MAIS3+	1,512	1,546	1,397	1,402	1,303	1,380	1,238	1,279	1,211		
BE*	5,739	4,736	4,581	4,484	4,181	4,095	3,762	3,637	3,600	2,968	3,054
BE MAIS3+	4,362	4,101	4,132	3,965	3,660	3,691	3,733	3,549	3,736	3,240	
BG	2,366	2,204	2,303	2,174	2,295	2,503	1,943	1,988	1,937	1,556	1,458
BG MAIS3+	2,366	2,204	2,034	2,175	2,295	2,503	1,943	1,988	1,937	1,556	
CY*	561	551	407	467	377	406	388	348	340	211	252
CY MAIS3+				83			92	85			
CZ	3,045	2,934	2,721	2,714	2,487	2,530	2,286	2,395	2,061	1,761	1,580
CZ MAIS3+											
DE*	68,985	66,279	64,045	67,709	67,706	67,426	66,513	67,967	65,244	57,983	54,826
DE MAIS3+				14,645							
DK	2,172	1,952	1,891	1,798	1,780	1,797	1,756	1,862	1,822	1,716	
DK MAIS3+											
EE*		476	501	455	407	424	429	420	356	346	352
EE MAIS3+											
ES	11,347	10,444	10,086	9,574	9,495	9,755	9,546	8,935	8,613	6,681	7,799
ES MAIS3+	7,420	7,047	6,613	6,343	6,955			6,059	6,162		
FI ⁽³⁾	1,308			519	477	460	409	485	390	408	
FI MAIS3+				519	477	460	409	485	390	408	
FR*	29,679	27,142	25,966	26,635	26,595	27,187	27,732				
FR MAIS3+	18,682	16,764	15,841	16,496	16,356	16,772					
EL*	1,626	1,399	1,212	1,016	999	879	706	727	652	518	563
EL MAIS3+											
HR	3,409	3,049	2,831	2,675	2,822	2,746	2,776	2,731	2,492	2,302	2,610
HR MAIS3+											
HU	5,152	4,921	5,369	5,331	5,575	5,539	5,627	5,559	5,482	4,655	4,596
HU MAIS3+											
IE ^{(4)*}	472	474	508	759	827	965	1,053	1,358	1,482	1,146	
IE MAIS3+				343							
IT											
IT MAIS 3+		13,112	12,899	14,943	15,901	17,324	17,309	18,614	17,600	14,102	
LU*	317	339	316	245	319	249	256	273	248	217	
LU MAIS3+					69	69	43	55			
LV*	531	493	452	434	479	525	496	542	461	491	
LV MAIS3+											
LT	1,755	1,562	1,481	1,437	724	655	368	165	308	376	491
LT MAIS3+					147	71	131	163	110	86	81
MT	235	300	265	292	306	294	304	317	305	242	339
MT MAIS3+											
NL	19,700	19,500	18,800	20,700	21,300	21,400	20,800	21,700	21,400	19,700	
NL - MAIS3+	6,100	6,400	6,500	5,800	6,000	6,400	6,500	6,800	6,900	6,500	
PL	12,585	12,049	11,672	11,696	11,200	12,077	11,103	10,941	10,633	8,805	8,276
PL MAIS3+			1,859	2,263							
PT*	2,265	1,941	1,946	2,010	2,148	1,999	2,117	1,995	2,168	1,723	2,029
PT MAIS3+	2,368	2,111	2,074	2,055	2,171	2,198	2,296	2,276	2,272	2,103	
RO	8,768	8,860	8,156	8,122	9,057	8,285	8,181	8,144	8,125	5,484	3,787
RO MAIS3+											
SE	4,518	4,450	4,826	4,889	4,313	4,472	4,371	4,160	3,850	3,600	
SE MAIS3+	1,102	1,032	1,091	1,159	906	962	903	921	790	833	
SI	919	848	708	826	926	850	851	821	814	678	784
SI MAIS 3+				213							
SK	1,168	1,122	1,086	1,098	1,121	1,057	1,127	1,272	1,050	914	869
SK MAIS3+											
UK*											
UK MAIS3+	4,949	5,160	5,236	5,741	6,092	6,547					
GB	34,149	33,692	31,788	33,555	32,132	30,899	29,766	30,204	29,122	22,627	25,739
GB MAIS3+	4,871	5,062	5,174	5,667	6,012	6,479					
CH*	4,437	4,202	4,129	4,043	3,830	3,785	3,654	3,873	3,639	3,793	3,933
CH MAIS3+	3,428	3,262	3,204	2,899	2,887	2,929	3,127	3,732			
IL ^{(5)*}	1,340	1,611									
IL MAIS3+			2,078	2,006	2,174	2,400	2,326	2,166	2,394	2,072	2,458
NO	680	703	712	683	693	656	665	602	565	627	569
NO MAIS3+											
RS	3,777	3,544	3,422	3,275	3,448	3,362	3,514	3,338	3,322	2,953	3,347
RS MAIS3+											
EU23 ⁽⁶⁾	175,934	169,976	164,417	171,086	172,680	174,198	170,311	172,979	166,637	143,377	144,193

* Similar national serious injury definition. EU23: EU27 excluding FI, IE, IT and LT due to insufficient data. EU23 average is an ETSC estimate as whole time series for serious injury data are not available in all 23 EU countries that collect data.

⁽¹⁾EU23 average for 2020 is an ETSC estimate as serious injury data in 2020 were not available in some countries.

⁽²⁾AT - serious injury data collection methodology changed in 2012.

⁽³⁾FI - the 2010-2011 figures are not comparable with years 2014 onwards because different tools have been used in conversion from ICD-codes to MAIS.

⁽⁴⁾IE - serious injury data collection methodology changed in 2014.

⁽⁵⁾IL - serious injury data collection methodology changed in 2013.

⁽⁶⁾The average annual change is based on the entire time series of all the ten annual numbers of road deaths between 2010 and 2020, and estimates the average exponential trend. For more information, read the methodological note, PIN Flash 6: [https:// bit.ly/2LVVUtY](https://bit.ly/2LVVUtY)

	Fig. 7 2011- 2021	Time period
EL	-65.4%	
RO	-56.8%	
CY	-55.1%	
BE	-48.3%	
CZ	-48.1%	
BG	-38.4%	
PL	-34.2%	
LU	-31.5%	2011-2020
ES	-31.3%	
EE	-26.1%	2012-2021
SK	-25.6%	
GB	-24.6%	
HR	-23.4%	
FI	-21.4%	2014-2020
DK	-21.0%	2011-2020
DE	-20.5%	
SE	-20.3%	2011-2020
NO	-16.3%	
SI	-14.7%	
AT	-13.4%	2012-2021
RS	-11.4%	
CH	-11.4%	
HU	-10.8%	
PT	-10.4%	
LV	-7.5%	2011-2020
FR	-6.6%	2011-2017
NL	0.0%	2011-2020
IT	7.6%	2012-2020
IL	18.3%	2013-2020
MT	44.3%	

EU23	-18.0%
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	Fig.9 Annual average change in the number of serious injuries 2011-2021 ⁽⁶⁾	
EL	-10.5%	
CY	-7.8%	
CZ	-5.7%	
BE	-5.5%	
RO	-5.5%	
BG	-4.2%	
LU	-3.8%	2011-2020
EE	-3.8%	2012-2021
ES	-3.8%	
FI	-3.8%	2014-2020
PL	-3.4%	
GB	-3.2%	
HR	-2.5%	
SE	-2.5%	2011-2020
NO	-2.1%	
SK	-1.9%	
DK	-1.6%	2011-2020
DE	-1.5%	
CH	-1.4%	
SI	-1.2%	
RS	-1.2%	
AT	-1.2%	2012-2021
PT	-0.7%	
FR	-0.6%	2011-2017
HU	-0.6%	
LV	0.1%	2011-2020
NL	0.8%	2011-2020
MT	1.4%	
IL	1.4%	2013-2021
IT	3.0%	2012-2020

EU23	-1.5%
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	Fig. 8*		
	Serious injuries (national def) per death	MAIS3+ per death	Time period
AT	18.3	3.0	2017-2019
BE	5.9	6.1	2018-2020
BG	3.2	3.2	2018-2020
CY	5.5	1.7	
CZ	3.2		
DE	21.3		
DK	10.2		2018-2020
EE	6.3		
ES	5.0		
FI	1.9	1.9	2018-2020
FR	8.0	2.4	2015-2017
EL	0.9		
HR	9.0		
HU	9.2		
IE	9.4		2018-2020
IT	5.7	5.7	2018-2020
LU	8.4	1.4	2016-2018
LV	3.6		2018-2020
LT	2.3	0.5	
MT	23.9		
NL	32.2	10.4	2018-2020
PL	3.6		
PT	3.3	3.7	2018-2020
RO	3.3		
SE	15.5	3.4	2018-2020
SI	7.7		
SK	4.1		
GB	14.1		
CH	16.7	14.4	2017-2019
IL	6.8	6.8	2016-2018
NO	6.3		
RS	6.2		2018-2020

*Numbers between countries are not comparable.

Table 5. National definitions of a seriously injured person in a road collision in Police records corresponding to the data in Table 4.

AT	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. As of 1.1.2012, only 2 instead of 3 degrees of severities, slight, degree unknown, severe. Therefore and because of lower underreporting due to the new police recording system, the figure increased substantially
BE*	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)
BG	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 MAIS 3+ levels, as it is defined in the CADaS Glossary.
CY*	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).
CZ	Negotiations between the Ministry of Interior and the Ministry of Health under way, implementation of MAIS3+ in 2022 (?), no current progress.
DE*	Hospitalised for at least 24 hours. Police records.
DK	All injuries except "slight". Police records.
EE*	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.
ES*	Hospitalised for at least 24 hours. Police records.
FI	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.
FR*	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.
EL*	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.
HR	ICD-International Classification of Diseases- used by medical staff exclusively, after admission to the hospital
HU	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.
IE*	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.
IT	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 (MAIS 3+) and using data based on hospitals discharge records.
LU*	Hospitalised for at least 24 hours as in-patient. Police records.
LV*	From 2004: hospitalised more than 24 hours as in-patient. Police records.
LT	Seriously injured person loses more than 30 % of his/her working capacity or/and his or her body is being incurably mutilated.
MT	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.
NL	Definition: "A serious road injury is a road crash casualty who has been admitted to hospital with a minimum MAIS (Maximum Abbreviated Injury Score5) injury severity of at least 2 on a scale of 6, and who has not died within 30 days from the consequences of the crash." Method: MAIS=2 or higher. Linked Police-Hospital records + remainder file + estimate of unobserved C/RC. MAIS3+ is a subset of MAIS2+; The MAIS2+ series is just appended with the new 2018 and 2019 figures in the new methodology, as EVG numbers have been 'officially' set and are only replaced on special occasions. The new method has an improved matching window for data/time of crash and data/time of hospitalisation, and is now expressed in AIS2005/08 (instead of AIS1990). The total estimate is hardly different, the number of MAIS3+ is lower in the new method. see https://www.swov.nl/en/facts-figures/factsheet/serious-road-injuries-netherlands

PL	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.
PT*	Hospitalised for at least 24 hours. Police records.
RO	From 2021 we use MAIS3+ with conversion approved by DG-MOVE because Ro Hospitals used ICD 10 Australian version.
SE	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.
SI	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.
SK	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.
UK*	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.
CH*	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
IL	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 MAIS 3+ or hospitalized for a period of 24 hours or more, not for observation only.
NO	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.
RS	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 6. Countries' progress in collecting data on seriously injured based on MAIS3+.

AT	The KfV carried out a feasibility study on MAIS3+ assessment on behalf of the (then) Austrian Transport Ministry (bmvt) 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.
BE	MAIS3+ data is currently available for 2005-2020 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.
BG	The only source is Police records.
CY	We have supplied to the Commission the data based on MAIS3+ for 2017 and 2018. For 2019, 2020 and 2021, it is unpredictable when the number will be calculated, because of the continuing COVID19 crisis.
CZ	Negotiations between the Ministry of Interior and the Ministry of Health under way, implementation of MAIS3+ maybe in 2022.
DE	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.
DK	No systematic linkage between police and hospital data. Denmark is working on a process to convert ICD diagnose codes into AIS and MAIS.
EE	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. We got MAIS3+ data, but there is a need to check if the data is reliable and methodology is fully correct.
ES	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.
FI	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.
FR	Linking between police and health data is done in the Rhone county and then used to build an estimate comparing the structure of Rhone and national accident data. Estimates of the number of people in road traffic crashes with a MAIS3+ injury are currently being evaluated.
EL	Hospitals do not systematically collect data on the injury severity of road casualties.
HR	Link between police and hospital is based on the law. Only ICD based number is available.
HU	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.
IE	Ireland has commenced a project to apply the EC algorithm to hospital data (2005- 2020) to produce MAIS3+ serious injury figures. 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. This project is expected to be completed by Q3 2023.
IT	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.
LU	MAIS3+ will be used in the near future.
LV	Technologically Latvia is ready to link accident data with health data, but we need to change legislation (planning in 2021). Is planning to start registered from 1st January, 2022.
LT	MAIS3+ data already available since 2014, but not all accident fields (MAIS3+) are filled - missing information.
MT	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.
NL	Data on MAIS3+ already available 1993-2018; at the moment, no further disaggregates of this data are available

PL	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 MAIS 3+ in Poland has been stopped. The method proposed by DG MOVE (conversion of ICD-10 scale on the MAIS 3+ 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 MAIS 3+ scale.
PT	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.
RO	From 2021 we use MAIS3+ with conversion approved by DG-MOVE because Ro Hospitals used ICD 10 Australian version.
SE	Data already available since 2007.
SI	We have made experimental linking between police and hospital data. MAIS3+ data are incomplete and not ready for publication and still under discussion.
SK	Under discussion.
UK	MAIS 3+ 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: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/555730/ras55050.ods
CH	Linking of health and police data has started in 2014. This allows to code the recommended maximum AIS score based on ICD-10.
IL	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 MAIS 3+ or hospitalized for a period of 24 hours or more, not for observation only.
NO	Under consideration.
RS	Road traffic safety agency has begin activities to introduce the MAIS 3+ scale to record serious injuries. During 2017, an analysis of the possibilities for the most efficient introduction of the MAIS 3+ scale was performed. Road Traffic Safety Agency intends to continue activities on introduction MAIS3+ definition of serious injuries in road traffic accidents in the next period.

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