Table of Contents

Context.............................................................................................................................................. 3
Five Years of Stagnation .................................................................................................................. 5
EU Priorities for the Future and ETSC’s Assessment ................................................................. 7
   Enhanced Road Safety Governance ....................................................................................... 7
   Stronger Financial Support for Road Safety ............................................................ 12
   Safe Roads and Roadsides .............................................................................................. 14
   Safe Vehicles ....................................................................................................................... 17
   Safe Road Use .................................................................................................................... 26
Fast and Effective Emergency Response ................................................................................ 33
New Mobility Patterns and Demographic Change ............................................................... 35
The Wider Global Picture and the EU’s Role ....................................................................... 41
Annex – Key Performance Indicators (KPI) .................................................................... 42
Context

In June 2019, the European Commission adopted the EU Road Safety Policy Framework 2021-2030,\(^1\) outlining specific policy measures planned for 2021-2030 and developing on the EU Strategic Action Plan on Road Safety published in May 2018.\(^2\) This briefing reflects ETSC’s first assessment of these initiatives with suggestions for further development and implementation.

This document refers mainly to the measures addressed by the European Commission in these latest documents. An earlier ETSC briefing, published in February 2018 as input to the Commission’s preparatory process, contains ETSC’s detailed recommendations for priority road safety actions for the next decades and, as such, covers a wider range of issues.\(^3\)

Strong measures and a wider coverage of existing and emerging road safety issues will be essential to addressing the recent stagnation in progress on reducing road deaths in the EU.\(^4\)

ETSC would like to highlight the following elements of the Commission’s proposals that are particularly welcome:

- A new target to halve road deaths between 2020 and 2030 as well as, for the first time, a target to reduce serious injuries by the same amount.
- Eight road safety Key Performance Indicators (KPIs) to be measured across EU member states with outcome targets to be adopted in the future.
- New funds to support road safety including the establishment of a “Safer Transport Platform”.
- Preparation of legislation on enforcement, driving licences and automated vehicles.

But ETSC also sees room for improvement and increased ambition, in particular, but not limited to, the following areas:

- Clearer priority measures for action are needed, as well as a detailed road map against which performance is measured and delivery made accountable to specific bodies;
- Specific measures need to be introduced to reduce serious injuries, in light of the

---

\(^4\) ibid
new target;

- Policy measures, not just further research, on important areas such as distraction and drug driving enforcement;
- Legislation, where appropriate, instead of unenforceable voluntary commitments;
- Recognition of the need to revise legislation in the medium term (i.e. in 2025). For example, the General Safety Regulation for new vehicles will need to be updated to encompass new technology developments, and the Infrastructure Safety Directive should also be updated more than once in a decade to account for new developments and the rate of progress.

In short, the Commission’s analysis of the current state of road safety in Europe is correct, but the planned policy approach will need renewed effort if it is to result in the needed rapid and far reaching improvement.

In particular, rapidly evolving technologies such as micro-mobility and automated driving need substantial regulatory efforts now to avoid creating new and unforeseen risks. Long-term research into these, and other areas, is welcome – but robust legislation following the precautionary principle and the Safe System Approach will be needed sooner rather than later.
Five Years of Stagnation

Since 2010, the average annual progress in reducing the number of road deaths in the EU is 2.8%; a 21% reduction between 2010 and 2018 (Fig.1). Most of that progress was made in 2011, 2012 and 2013. A 6.7% year-to-year reduction was needed over the 2010-2020 period to reach the 2020 target (to halve road deaths in a decade) through consistent annual progress.

Since 2013, the EU as a whole has been struggling to reach a breakthrough. The number of road deaths declined by only 4% in the five years since 2013. For the EU to reach the 2020 target, road deaths now need to be reduced by around 20.6% annually in 2019 and 2020 – an unprecedented and highly unlikely possibility.

Figure 1. Reduction in the number of road deaths since 2010 (blue line) plotted against the EU target for 2020 (blue dotted line).

---

The weekly number of road deaths in the EU – around 500 - is equivalent to two typical passenger airliners crashing and killing everyone on board. In addition, around 135,000 people were seriously injured on European roads in 2014 according to European Commission estimates based on the MAIS3+ definition of a serious injury. The progress in reducing serious injuries is known to be much slower than the progress in reducing road deaths.

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.
EU Priorities for the Future and ETSC’s Assessment

ETSC welcomes the priorities chosen for the next decade included in the EU Strategic Action Plan. These are listed below together with ETSC’s analysis and further recommendations for improvement to be considered during the further development and implementation phase.

Enhanced Road Safety Governance

New framework in 2019, future vision and targets

Under the section on “Safe System approach at EU level” the EC presents a framework including targets, Key Performance Indicators as well as looking at how to change the structures to deliver and improve road safety policy at EU level.

ETSC welcomes that the announced EU Road Safety Policy Framework for 2021-2030:

- Will be guided by the long-term Vision Zero⁸ and embody the “Safe System Approach”.⁹
- Will enshrine the targets adopted in the Valletta Declaration¹⁰ to reduce both deaths and serious injuries by 50% between 2020 and 2030.

ETSC recommends:

- Adopting specific targets to reduce deaths of children and vulnerable road users.¹¹

---

The new strategy also includes Key Performance Indicators. In an initial phase, eight have been chosen which will form the basis for monitoring progress in the joint road safety work at EU, Member State, regional and local level. Member States are due to start collecting data in 2020. 2020 will be taken as the baseline year for the value of the indicators. 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.

ETSC strongly supports the inclusion of the new Key Performance Indicators and has been advocating for their introduction as a key way of identifying policy needs for many years.

KPIs can give a more complete picture of the level of road safety and can detect the emergence of problems at an earlier stage.

ETSC welcomes:

- The first list of Key Performance Indicators (KPIs) and the possibility to develop the initial indicators further as well as add new ones.
- Financial support to the Member States to facilitate the work on the methodology and measurements.
- The two-step process, whereby in a second phase, outcome targets would be set based on the data collected.
- The aim to collect comparable data, bearing in mind that some differences in national rules will constrain comparison for some of the indicators.
- That progress will be monitored within the High Level Group on Road Safety, which is now open to stakeholders once a year, and discussed every two years at the results conferences.

---

13 ibid
ETSC recommends the EC:

- To extend and improve the current KPIs based on ETSC recommendations (see Annex).
- To set the outcome targets for 2030 to match the performance of the three best performing countries for each indicator.
- To support Member States in collecting harmonised data.

ETSC recommends to Member States:

- To allocate as soon as possible the necessary budget to collect data in 2020 and beyond.

**In-depth accident investigation**

At present there is a general lack of representative pan-European in-depth collision data to aid the development of safety policy, vehicle regulation and technological advancement.

ETSC asks the European Commission to:

- Support EU Member States in collecting harmonised in-depth accident investigation data relating to fatal and serious injury collisions.\(^{16}\)
- Create a pan-European in-depth accident investigation database building on the DaCoTa deliverable related to in-depth accident investigation.

In-depth investigation is already a very useful tool – but will become critical in the age of automation as has already been highlighted by the multiple US NTSB reports into collisions of vehicles featuring advanced driver assistance systems such as Tesla Autopilot.\(^{17}\)

**New structures, role of ambassador, and cross DG coordination group**

Road safety policy needs to be supported by effective institutional management in order to achieve long term effects on road safety. Clear institutional roles and responsibilities should be set up with strong political leadership from the Commissioner for Transport.\(^{18}\)

As well as putting forward legislation, in the next decade the European Commission must

\(^{16}\) ibid

\(^{17}\) See, for example, NTSB (2019) PRELIMINARY REPORT HIGHWAY HWY19FH008, [https://bit.ly/2Yg44za](https://bit.ly/2Yg44za)

continue to fulfil its crucial role in supporting and motivating EU Member States to act. Some of these aforementioned elements are included in the adopted EU Strategic Action Plan. Most recently, ETSC welcomed the nomination of a senior European Commission figure to the role of ‘EU Road Safety Co-ordinator’.

The earlier skeleton Road Safety Action Plan included the ‘creation of a cross-DG co-ordination group’. To the regret of ETSC this has been scaled down: ‘the Commission will co-ordinate more systematically at senior management level, involving all of its Directorates-General with policies relevant to road safety objectives, to steer the operation of the framework and any future additional policy initiatives that derive from it’. ETSC would encourage the EC to nominate a cross-DG group as originally planned and make sure that the meetings are regular and followed up with clearly-assigned responsibilities to ensure continuity, political leadership and shared ownership.

The development of a more complete framework which should include clear priority measures for action and a detailed road map against which performance is measured and delivery made accountable to specific bodies (see Irish Road Safety Strategy).

The framework should summarise the measures in different priority areas and how the tools fit together.

ETSC welcomes:

- Enhancing the mandate of the High Level Group on Road Safety including the organisation of results conferences every two years.
- The appointment of a European Coordinator for Road Safety.
- Co-ordination at senior level involving all DGs with policies relevant to road safety.

ETSC recommends:

- Develop a more complete framework including clear priority measures for action and a detailed road map against which performance is measured and delivery.
made accountable to specific bodies.

- A cross-DG co-ordination group reporting both to the relevant commissioners, the Road Safety Co-ordinator and to the European Commission’s High Level Group on Road Safety.

- Strengthening DG MOVE’s lead road safety unit capacity particularly in any further development of its road safety strategy and targets, coordination, monitoring and evaluation functions.

- Creating a European Road Safety Agency responsible for the collection and analysis of data, helping speed up developments in road safety and providing a catalyst for road safety information and data collection. The agency could also come up with new safety standards for vehicles as well as overseeing and coordinating EU input to the UNECE process.

---

Stronger Financial Support for Road Safety

Cost to society

Both road deaths and serious injuries carry a huge cost to society. In monetary terms alone, the yearly cost of road collisions in the EU has been estimated in a new study to be around EUR 280 billion, equivalent to about 2% of GDP.  

The EC’s EU Strategic Action Plan proposes a new package of funding measures which will be further supported by the 2021-2027 EU budget.

ETSC welcomes:

✓ That EU co-legislators have agreed to make road safety actions more clearly eligible in future instruments (the Invest EU21 and the CEF2 Regulation).

✓ The proposal of the ‘common provisions’ regulation for European Social Fund (ESF), European Regional Development Fund (ERDF) and the cohesion funds including a new possibility for financial support to “assess road safety risk in line with existing national road safety strategies, together with a mapping of the affected roads and sections and proving with a prioritisation of the corresponding investments”.

✓ The creation of a new Advisory Hub on road safety together with the European Investment Bank.

✓ Within the EU budget, the EC’s intention to support other initiatives such as, for example, joint cross-border road traffic enforcement operations organised in cooperation between police bodies.

✓ New measures to support capacity building at Member State level, for example supporting the development of Safe System strategies including the collection of

27 European Commission (2018), ANNEXES to the Proposal for a REGULATION laying down common provisions on the European Regional Development Fund, the European Social Fund Plus, the Cohesion Fund[...]. https://goo.gl/bi22JA
Key Performance Indicators.30

✔ Road safety priorities set in the new Research and Innovation Framework Programme Horizon Europe.

This is all welcome and fits with priorities set out in the proposed EU Strategic Action Plan such as: enforcement, infrastructure and capacity building amongst EU Member States on road safety management.31 This is also in line with the ETSC recommendation that EU funds should support the implementation of those measures included in the EU Road Safety Programme 2021-2030 which have the highest lifesaving potential.

ETSC recommendations:

- Identify, within the new Multiannual Financial Framework (MFF) budget, investment in new road safety measures such as, for example, regional funds for roads being conditional on improving infrastructure safety.
- Create an EU fund to support priority measures such as for cities to introduce 30 km/h zones (particularly in residential areas and where there are a high number of VRUs) and to invest in high risk roads, which carry a high percentage of traffic.

30 Ibid
31 Ibid
Safe Roads and Roadsides

ETSC welcomes that the EC sets proposals for ‘safe roads and roadsides’ within the Safe System approach which means that ‘road engineering involves matching road function, design, layout and speed limits to accommodate human error in a way that road collisions do not lead to death and serious injury’. 32

Revision of the Road Infrastructure Safety Management Directive 2008/96

ETSC welcomed the agreement in February 2019 on the revision of the Infrastructure Safety Directive 2008/96. 33 Existing EU rules require governments to carry out regular road safety audits, identify high-risk sites and prioritise safety when building new roads but the legislation currently applies only to major European roads known collectively as the Trans-European Transport Network (TEN-T). The main changes under the revised legislation include: extending the scope beyond the trans-European transport network roads (TEN-T) to primary roads, more transparency, network-wide risk assessment and strengthening the requirements to protect vulnerable road users. Common specifications will also be drawn up for road markings and road signs.

The revised directive will cover all motorways, all “primary roads” and all non-urban roads that receive EU funding. ETSC, and other organisations, had been calling for all main urban and rural roads to be covered, but this was not taken up unfortunately. Moreover, regrettably road authorities will be able to choose some low-risk roads, or roads with little traffic to opt-out of the legislation.

According to the initial analysis the proposed measures would save over 3,200 lives and avoid more than 20,700 serious injuries over the decade 2020-2030. 34

The text agreed by the European Parliament is due to be published and enter into force in the autumn of 2019. ETSC calls upon the EU Presidency of Finland to follow through on the finalisation of this Directive.

ETSC welcomes:

- The revised Infrastructure Safety Directive, especially the extension to primary roads.
- Setting up of an expert group to develop a framework for road classification that

---

32 ibid
33 Text of Final Trialogue Deal 21/02/2019 https://bit.ly/2X2Vx1W
better matches speed limit to road design and layout in line with the Safe System approach.\(^{35}\)

- Setting up a forum of European road safety auditors to facilitate exchange of experience on Safe System methodologies.

ETSC recommends:

- The EC to strongly encourage EU Member States to designate the maximum number of primary roads on their territory to increase the road safety potential of the new directive.
- The swift preparation, in light of the revised directive, of the technical guidance on ‘road design quality requirements’ for Vulnerable Road Users, ‘methodology on road safety assessments & safety ratings’, ‘design of forgiving and self-explaining/enforcing roads’ and ‘reporting of collisions and their severity’ and the preparation of ‘common specifications’ for road markings and road signs to support EU Member States.

ETSC supports the suggested actions under Point 4.1 on improving road infrastructure management.\(^{36}\) ETSC would also add the need to review the implementation effects of the revised directive and consider further improvements in the second half of the 2020-2030 strategy period.

ETSC recommendations for a future revision of the Road Infrastructure Safety Management Directive (RISM):

- Extend the application of the instruments of the RISM Directive to cover all EU co-financed roads, all primary roads including all main rural and main urban roads.
- Support common EU curricula for auditors and inspectors, including specific training on the needs of VRUs: pedestrians, cyclists, PTWs, the elderly and road users with reduced mobility.
- Following the establishment of guidelines, establish minimum requirements for:
  - The harmonised management of high-risk sites;
  - “Forgiving roadsides” and ‘self-explaining’ and ‘self-enforcing’ roads.
- Set up guidelines for:
  - Promoting best practice in traffic calming measures, based upon physical measures such as roundabouts, road narrowing, chicanes, road humps and techniques of space-sharing, to support area-wide urban safety


\(^{36}\) ibid
management, in particular when 30 km/h (or 20 mph) zones are introduced and where there are high levels of VRUs.

- Further disseminate the safety results of the European map to be published under the requirements of the new Directive highlighting different categories to help inform citizens on route choice.
Safe Vehicles

Revision of the General Safety Regulation and Pedestrian Safety Regulations

Under section 4.2 on “Safe vehicles”, the EC lists some of the measures included in the recent revision of the General Safety Regulation and the Pedestrian Safety Regulation.\(^{37}\) The revisions of these regulations represent the most direct and effective measures the EU has to further reduce road deaths and injuries.\(^{38}\) TRL, the UK transport research laboratory, estimated in a study for the European Commission that the package of proposed vehicle safety measures could prevent around 25,000 deaths and 140,000 people seriously injured across all vehicle categories within 15 years.\(^{39}\)

The EC is also assessing whether retrofitting the existing fleet (particularly buses and trucks) with Advanced Driver Assistance Systems (ADAS) is feasible and cost-effective under section 4.\(^{40}\)

A further additional priority is to redesign the crash test dummy and to include more aspects of variability like age, gender, size and stature, as well as designing for those users outside of the vehicle.\(^{41}\) Only “male” dummies are used in regulatory crash tests at present.

ETSC welcomes:

- Plans to evaluate future developments, as the provisions within the GSR will need to be reviewed well before the end of the 2020-2030 strategy period in order to keep pace with technical advances.

---


✓ Other priorities for evaluation include roadworthiness testing, under which ETSC would welcome especially the extension of regular mandatory technical checks to motorcycles and vans.42

✓ The EC commitment to ‘work with Member States to enable necessary conditions for the functioning of overridable Intelligent Speed Assistance 43, including regarding the availability of speed limits in a digital format, and consider the feasibility and acceptability of non-overridable Intelligent Speed Assistance in the future’.44

✓ The EC commitment to assess the cost-effectiveness of retrofitting the existing fleet with safety technologies.

Following the adoption of the new minimum safety standards for new vehicles, ETSC recommends:

- To deliver on the estimated number of deaths and serious injuries prevented by adopting strong and timely secondary regulation implementing the General Safety Regulation.
- To require a high level of performance of Intelligent Speed Assistance systems to be fitted in all new vehicles.
- Consider the practical application of mandating the fitment of overridable Intelligent Speed Assistance systems45 on motorcycles.
- To consider the feasibility and acceptability of non-overridable Intelligent Speed Assistance46 for cars, vans, trucks and buses in the future.
- To mandate top speed limiters on vans, such as for trucks and buses.
- To consider the feasibility of limiting the maximum top speed of all new vehicles as an effective way of reducing road casualties, but also air pollution and carbon dioxide emissions.
- To develop crash test dummies representative of more aspects of variability such as age, gender, size and stature for vehicle occupants, as well as for those users outside of the vehicle.

43 ISA is a vehicle safety technology already available on several models of new car in EU showrooms. ETSC is calling for ISA systems that use a sign-recognition video camera and a GPS-linked speed limit database to help drivers keep to the current speed limit. Such a system will limit engine power when necessary to help prevent the driver from exceeding the current speed limit. The system can be overridden, or temporarily switched off. As well as improving road safety, reducing emissions and saving fuel, the system can help drivers avoid speeding fines. https://etsc.eu/briefing-intelligent-speed-assistance-isa/
44 ibid
45 ibid
46 ibid
• Consider the compatibility issue within future vehicle design to improve further the safety of pedestrians, cyclists and vehicle occupants as well as powered two wheelers.

• To encourage Member States to provide tax incentives for the purchase and use of safe cars (for example five star Euro NCAP).

• To revise legislation on car CO2 labelling and marketing to require inclusion of Euro NCAP test results when available.

• Promote technologies or applications that remind the driver on exiting the vehicle that the child seat is occupied.

**European vehicle safety standards and the role of the UNECE**

Over the last two decades, there has been considerable political pressure to regulate technical standards for vehicles at the global level. Many new technical standards that apply in the European Union are now developed, with EC and EU Member State participation, at the global forum of the United Nations Economic Commission for Europe (UNECE/WP.29), based in Geneva. Once rules have been agreed, they are signed off by Member States and then cut and pasted into EU law as a fait accompli - with the only possibility for co-legislators to take it or leave it.

The benefits are reduced barriers to trade and lower costs for the car industry. The main weaknesses include limited oversight by both co-legislators of the process, as well as very limited public scrutiny and participation. NGOs, including ETSC, struggle to find the necessary resources needed to follow the multitude of highly technical meetings that take place both in Geneva and around the world. Media scrutiny of the process is virtually non-existent.

ETSC believes that, ideally, vehicle safety technical regulations for the European Union should be developed at the EU-level, as an EU-first approach would be better tuned to the road safety needs of the EU and potentially deliver regulations faster with more rapid updates to reflect the evolution of technology.

A bespoke EU road safety agency, staffed with technical, legal and road safety experts, would be the ideal solution as is the case in the United States (NHTSA – The National Highway Traffic Safety Administration).

But if the EU continues with the current approach to establish the technical rules at UNECE level, then ETSC proposes the following safeguards:

• Enable the European Parliament to participate in the UNECE regulatory process and ensure that all its Members are sufficiently informed to properly scrutinise both the progress of development as well as the content of the technical rules,
notably those relevant for the implementation of the new GSR.

- As a minimum therefore, the European Commission should present annual reports to the European Parliament (and Council) on progress on technical regulations at the UNECE.

- In addition, the European Commission should present the progress on technical regulations at UNECE level during the meetings of the relevant European Parliament’s Committee preceding the World Forum’s meetings in March, June, November.

- All relevant EU legislation should include a mechanism with a built-in deadline to ensure that, if progress is not made fast enough at UNECE level; the EC is obliged to revert to developing an EU standard.

**Automated Driving**

Under this section in the Strategic Action Plan the EC places a focus on preparing for connectivity and automation.47

ETSC welcomes:

- The EC (DG MOVE together with DG GROW and DG Connect) working with stakeholders to develop a ‘code of practice’ in autumn 2019 for the safe transition to higher levels of automation, making sure that approval requirements and certification procedures take road safety considerations into account.48 Here they include mixed traffic, interaction with other road users and platooning.

- The possibility of evaluating whether to review a range of legislation in light of developments in cooperative, connected and autonomous mobility into account. This includes driving licences, roadworthiness, training of drivers and driving time.

- Evaluation of how it might strengthen the coordination of traffic rules (UN Geneva and Vienna Conventions), including at the EU level, so that traffic rules can be adapted to cooperative, connected and autonomous mobility in a harmonised way.

ETSC welcomes the EC’s work on automated and connected mobility, as there is an urgent need for a comprehensive regulatory framework for vehicles with automated driving systems on-board.

---


48 Ibid.
Although the EC indicates that the new GSR provides a “clear legal framework” for the (type-) approval of automated vehicles, detailed and robust technical standards are not yet adopted. The framework will furthermore only apply as of 2022, and until then guidelines on the use of the type-approval exemption procedure will be used instead.

ETSC already expressed its safety concerns regarding the lack of transparency of the exemption procedure⁴⁹, and furthermore considers the new guidelines insufficient to guarantee safety and transparency. ETSC calls on the EC to place the role of the driver as well as interaction between the driver and the automated driving systems as central when preparing technical requirements, as these are missing or taken for granted in the recent regulatory developments.

ETSC recommendations:

- Develop a coherent and comprehensive EU regulatory framework for the safe deployment of vehicles with automated driving systems on board as well as for autonomous vehicles.
- Complement the EU type approval regime to ensure that automated vehicles are safe and comply with all specific obligations and safety considerations of the traffic law in all EU Member States.
  - This includes setting out detailed 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’.
- Revise the EU Directive 2006/126 on driving licences to make sure all new drivers are trained in using the new technologies as well as semi and fully automated driving.⁵⁰

**ITS and C-ITS**

As Cooperative Intelligent Transport Systems (C-ITS) have the potential to significantly improve road safety, as concluded by the C-ITS Platform in its final report⁵¹, ETSC calls on the EC to swiftly come forward with a revised delegated act on the specifications for C-ITS, given that the Council recently raised objections to the EC’s proposed act.

Moreover, the study supporting the impact assessment for the EC’s delegated act on C-ITS showed that by mandating vehicle-to-vehicle (V2V) C-ITS services in new vehicles, the

---

road safety benefits of C-ITS would be significantly increased when compared to the delegated act, which relies on a voluntary uptake of C-ITS.\textsuperscript{52} ETSC therefore calls on the EC to swiftly follow-up on the revised delegated act with a legislative proposal mandating road safety-enhancing C-ITS services in new vehicles.

ETSC’s priority C-ITS services include in-vehicle dynamic speed limits, emergency electronic braking lights, road works warning, weather conditions, intersection safety and vulnerable road user protection.

ETSC recommends the EC to:

- Present a revised delegated act on the specifications for C-ITS by the end of 2019.
- Swiftly follow-up with a legislative proposal mandating the deployment of the safety-enhancing V2V C-ITS services in new vehicles.
- Prioritise the deployment of C-ITS services with the highest safety potential, those with a proven road safety record, low cost solutions and those with a high benefit-to-cost ratio.
- Research the cost-effectiveness of retrofitting older vehicles with an on-board unit which could provide basic C-ITS services that enhance road safety.

**Human Machine Interface**

ETSC welcomes:

- That the EC will evaluate the need for action in promoting the harmonisation of human-machine interface fitted to vehicles to ensure all drivers and users can interact with vehicles without compromising safety.

ETSC calls for:

- A long over-due update of the European Statement of Principles on human-machine interface (HMI) to include advanced driver assistance systems, cooperative intelligent transport systems (C-ITS), as well as automated and autonomous driving.
- An obligation for vehicle manufacturers to publish their tests to show compliance with the European Statement of Principles on HMI. External HMI is also a new area for urgent review in preparation for automation.
- HMI should be a priority for the 9\textsuperscript{th} EU R&D Framework Programme.

Procurement

Under the vehicle safety section the EC also plans to look at how safety considerations can be made more prominent in EU public procurement legislation. It cites the possibilities to financially assist initiatives for fleet safety upgrades in the context of the “Safer Transport Platform”. This is welcome.

Under this section, the EC should also revise existing Directive 2014/24/EU on public procurement by including “safe workers” under the social clause. ETSC would advocate a more precise interpretation of the clause so as to include reducing road risk. That would encourage or even oblige procurers to develop and apply criteria on Work Related Road Safety. For example, obliging public authorities to adopt safety criteria when procuring vehicles such as the Euro NCAP five star safety rating.

Under section 4.2, the EC is also seeking voluntary commitments from manufacturers to roll out safety features beyond the minimum requirements in all price segments. It took several decades for automotive innovations such as anti-lock braking systems, airbags and even seat-belts from being introduced in cars in the premium segment until they trickled down to all models. This is why regulation is needed to ensure that safety benefits are spread faster among the entire fleet of new vehicles and that safety improvements are not limited to better informed or wealthier consumers.

ETSC favours the introduction of mandatory fitment with key safety equipment as standard under legislation under the General Safety Regulation. However it recognises that earlier introduction of life saving equipment by manufacturers can also make an important contribution to saving lives.

ETSC recommends:

- Revision of existing Directive 2014/24?EU on public procurement by including “safe workers” under the social clause.

In defence of EU road safety legislation

A part of the proposed actions in the Commission’s road safety action plan come in the shape of ‘voluntary commitments’ from stakeholders, for example the ‘Vision Zero’
pledge from ACEA.\(^{57}\) Although such commitments can be welcome, especially in new areas as a precursor to legislation, it is less favourable as the action may not end up being completed without the legislative obligation.

Moreover, there are areas under the ‘voluntary commitment’ section which belong to current EU legislation. One example is work-related road safety. Duty of care and health and safety compliance covering safe road use are legal necessities in all EU Member States, and are an essential consideration for employees.\(^{58}\) The EC encourages hauliers, professional drivers and other companies to create a ‘safety-at-work’ culture. However, such a culture should be the result of risk assessments undertaken to comply with legal obligations of the EU Directive 89/391/EEC on health and safety of workers. This requires every employer in Europe to undertake a risk assessment according to the principle of prevention.\(^{59}\)

ETSC recommends:

- The EU itself should be leading by example by implementing work-related road safety management programmes for the EU institutions and their own vehicle fleets. National authorities should be doing the same (following the example of Sweden).

**Financial incentives: insurance and taxation**

ETSC welcomes:

- The EC is calling on the insurance industry to consider changing the structure of their premiums in favour of safer vehicles. There are some good examples of best practice from the work-related road safety field where insurers work proactively with their clients to adopt programmes to prevent collisions and this may include fleet fitment with in-vehicle safety technologies.\(^{60}\)

**Driver training**

ETSC welcomes:

- The EC proposal that driving schools train new and existing drivers and riders in how to use new vehicle safety features.

\(^{59}\) *ibid*
ETSC calls for:

- The revision of EU Directive 2006/126 on driving licences to make sure all new drivers are trained in using the new technologies as well as semi and fully automated driving.\(^{61}\)

Safe Road Use

Under Objective 4.3 “Safe road use” the EC focuses actions on behaviour of road users covering speed, use of protective equipment such as seatbelts, child restraint use and crash helmets, driving without alcohol and drugs and distraction. The EC recognises that: ‘although general education and awareness have been shown to be generally less effective and have had less prominence in modern Safe System approaches that driver licensing, targeted education and awareness raising, supported by strong and sustained compliance and enforcement all have an important role to play’. ETSC agrees with this view. Many countries who have managed to make good progress have done so by applying these aforementioned measures.

Enforcement

Here enforcement is identified as a priority with a commitment to review options in improving the Directive 2015/413 on cross-border enforcement (CBE) of traffic offences and a possible legislative initiative on the mutual recognition of driving disqualifications. A recent ETSC report has identified a number of barriers which need to be addressed in the upcoming revision of the CBE Directive, such as updating the camera specifications, a lack of human resources in case of manual follow up and that following up on these offences is not seen as a political priority. Mutual assistance procedures need to be adapted so that they can also be used more efficiently for the follow-up of the non-payment of traffic fines.

ETSC welcomes:

- The commitment to review options in improving Directive 2015/413 on cross-border enforcement of traffic offences and a possible legislative initiative on the mutual recognition of driving disqualifications.

- The proposal to tackle mutual recognition of non-financial penalties. ETSC’s briefing elaborates further actions on enforcement such as improving and aligning the enforcement of the main offences at a national level. A common approach is needed to allow for equal treatment of connected and automated vehicles across Europe.

ETSC recommends:

- Encourage EU Member States to run consistent enforcement activities that are

---

well explained and publicised thereby having a long-lasting effect on driver behaviour.  

- Continue to encourage EU Member States to prepare enforcement plans with annual targets for enforcement and compliance in the priority areas.
- Evaluate the barriers preventing full implementation of the CBE Directive 2015/413 and adopt countermeasures to overcome them within the revision of the directive.
- Adapt existing EU mutual assistance procedures to deal with cross border road traffic offences.
- Recast the Framework Decision 2005/214 to include civil/administrative offences as this would provide an important final part in the enforcement chain.
- Investigate avenues for EU revision of existing legislation to cover the mutual recognition of non-financial penalties such as driving disqualifications and demerit point systems.
- Set up and implement a demerit point system which includes a set of fixed penalties for at least the eight major road safety related offences included in the CBE Directive 2015/413.
- Intensify enforcement, especially of speeding, in urban areas where there are high numbers of pedestrians and cyclists.

**Safe Speed**

Only one specific action is included here (along with the KPI – see Annex) on defining and implementing the notion of ‘safe speed’ which is much welcomed. However action to tackle speed is mentioned under the sections before on vehicle with ISA, infrastructure and enforcement. Speed should remain a top priority issue in tackling road deaths and serious injury within the EU strategy.

The European Commission could develop an EC Recommendation on speed covering infrastructure, vehicle and enforcement. For infrastructure this could follow-up on the work of the new EC led expert group which is due to develop a framework for road classification and encourage Member States to apply safe speed limits in line with the Safe System approach.

ETSC recommends:

- The adoption of a European Commission Recommendation on speed covering infrastructure, vehicle and enforcement areas.

---

Drink Driving

ETSC welcomes:

- Guidance to Member States on the use of alcohol interlocks. ETSC has recently developed guidance for the development of alcohol interlock-based rehabilitation programmes.\(^6^6\)

- Under the part on voluntary commitments the EC calls upon public authorities to require the fitment of alcohol interlocks in public procurement. Although welcomed by ETSC as a way of increasing the fitment of this life saving tools, as mentioned earlier this could come about as part of binding legislation as opposed to a ‘voluntary commitment’.

Strengthening the existing EU Recommendation on permitted BAC 2001/115 is also on the ‘to do’ list of the Commission. It wants to extend it to professional drivers and novice drivers. Yet this is already included in the recommendation dating from 2001. At present 9 EU MSs have still not introduced lower BAC limits for these groups.

ETSC recommends:

- Propose a directive on drink driving, setting a zero-tolerance level for all drivers.
- Mandate alcohol interlocks for repeat offenders and professional drivers.

Drug Driving

The DRUID study estimated that illicit and medicinal psychoactive drugs were found in 15% and 15% respectively of road deaths.\(^6^7\)

ETSC welcomes:

- The EC plans to encourage and support research under the future research and innovation programme on developing testing methods and cheaper tools for drug detection.

- The intention to develop further drug testing procedures to detect psychoactive substances and establish a common approach amongst all EU MSs so as to enable a KPI to be set in the near future.

---


\(^6^7\) European Commission (2011), DRUID Deliverable 2.2.5, Prevalence of alcohol and other psychoactive substances in injured and killed drivers, pp. 164-166, [https://goo.gl/j52ryq](https://goo.gl/j52ryq)
ETSC recommends:

- EU policy implementation following years of research.
- Introducing an EU zero tolerance system for illicit psychoactive drugs using the lowest limit of quantification that takes account of passive or accidental exposure.
- Adopting 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.
- Adopting a common standard for roadside drug driving enforcement, this could be in the form of a new EC recommendation.\(^\text{68}\)
- Encourage EU Member States to incorporate drug driving education into school based road safety initiatives, and target education and campaigns at high risk groups such as young males.

**Fatigue**

Research shows that driver fatigue is a significant factor in approximately 20% of commercial road transport collisions and is also present in the non-professional driving population.\(^\text{69}\) Apart from a brief mention under a possible drowsiness detection technology, the EU Strategic Action Plan on Road Safety has not included any other action on preventing driving whilst fatigued.

ETSC recommends:

- Action on a number of possible areas from improving compliance with tachograph legislation to safe and secure infrastructure for resting.\(^\text{70}\)

**Distraction**

ETSC welcomes:

- The proposal to develop a code of good practice with industry to ensure that in-car information systems are designed to allow safe use.\(^\text{71}\)
- The introduction, in the new GSR of ‘advanced distraction recognition’, a system capable of recognition of the level of visual attention of the driver to the traffic

---


situation and warning the driver if needed.

- Encouraging and supporting research on avoiding inattention including distraction by electronic systems integrated in vehicles.

ETSC recommends:

- The EU to ban use of mobile phones while driving, including hands free.
- The European Commission to support Member States in developing a camera to detect and enforce mobile phone use at the wheel.
- The EC to encourage telecom companies to develop a driving mode, that will automatically detect that its owner is driving and turn off all notifications.
- Evaluate the impact of distraction of PTW riders and come up with countermeasures (see PTW section).

Seat Belts

ETSC welcomes:

- The intention to assess mandating individual electronic safety belt reminders in coaches.

Safety of children, young people and novice drivers

In 2016 alone, 600 children died on Europe’s roads. Mortality due to road collisions is a major cause of death in this age group. \(^2\) This is noted in the new EC document and children are included as a special priority group in the UN Sustainable Development Goals Target 11.2, which will be discussed at the upcoming Global Ministerial Conference on Road Safety in 2020 in Stockholm. However, there are few actions in the EC Strategy on improving child safety.

ETSC welcomes:

- The EC has identified action within the education sector making road safety part of the regular curricula.
- Identifying the need for future action on graduated licencing for novice drivers.
- Under the other voluntary commitment actions suggested by the EC they would also seek taxi and ride sharing companies providing their fleets with child seats.

ETSC has previously made this recommendation in a report on taxi safety.\textsuperscript{73}

**ETSC recommendations:**

- Under Directive 2005/39, make rear-facing child seats mandatory for as long as possible, preferably until the child is 4 years old.\textsuperscript{74}
- Promote the possibility allowed by Directive 77/388/EEC for Member States to lower the VAT rate by considering child car seats an essential product.
- Support rental schemes of child seats, providing safety checks are performed before the child seat is rented.
- Recognise the limitations of children in traffic, thus establishing a hierarchy of road users, where the adult is always responsible.
- Develop EU guidelines for traffic safety and mobility education, especially for children up to 18 year olds.
- Develop EU evaluation tools to design, implement and evaluate traffic and mobility education.\textsuperscript{75}
- Adopt a specific target to reduce deaths of children.\textsuperscript{76}
- Encourage Member States to introduce a ban on children under the age of 16 using e-scooters.

**ETSC recommendations for the revision of EU Directive 2006/126 on driving licences:**

- 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.\textsuperscript{77}
- Introduce hazard perception training, expand formal training to cover driving and riding style as well as skills and encourage more accompanied driving to help gain experience.
- Develop minimum standards for driver training and traffic safety education with gradual alignment in the form, content and outcomes of driving courses across the EU.

\textsuperscript{76} ETSC (2018) Briefing: 5\textsuperscript{th} EU Road Safety Action Programme 2020-2030. \url{https://bit.ly/2LuTDBW}
\textsuperscript{77} ibid
• Ensure testing allows examiners to ascertain a safe driving style by including aspects such as independent driving.
• Lower the BAC limit for all young drivers including novice drivers.
• Make theoretical and practical training as well as a practical test mandatory for obtaining a driving licence for moped driving (AM).
Fast and Effective Emergency Response

Since 2010 the number of people seriously injured based on national definitions of serious injury on EU roads was reduced by just 1%, compared to a 20% decrease in the number of deaths in the same group of countries. In 2014, around 135,000 people were seriously injured in the EU based on the common EU definition MAIS3+ according to estimates by the European Commission. There is strong political support to take action on serious injuries.

The newly-agreed target to halve serious injuries by 2030 needs to be followed up with specific measures.

ETSC welcomes:

- The proposed measures under section 6. Fast and effective emergency response, such as the evaluation of eCall and possible eCall extension to other vehicle categories. However, more focus should be given to other concrete actions on serious road traffic injury reduction.

- The commitment to further facilitate closer contacts between road authorities and the health sector to assess further practical and research needs.

Given that there are high numbers of serious injuries in urban areas, actions could include preparing guidelines to promote best practice in traffic calming measures and supporting area-wide urban safety management, in particular when 30km/h zones are introduced. Many serious injuries could also be avoided by reducing speed, thus actions such as ISA in vehicles, speed enforcement and infrastructure to reduce speed should all be prioritised.

The European Commission should also actively encourage Member States to develop effective post-collision care to ensure that all countries offer equally high standards of rescue, hospital care and long-term rehabilitation following a road collision. More detailed recommendations are included in ETSC’s recent report on ‘Post-collision response and

---

78 It is not yet 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 performance over time. The comparison therefore takes as a starting point the changes in the numbers of seriously injured (national definition) since 2010.
81 Ibid
emergency care (2019)\textsuperscript{82} and our Strategy to Reduce Seriously Injured (2016)\textsuperscript{83} and ETSC’s original input document to the new EU strategy (2018)\textsuperscript{84}.

ETSC recommendations:

- 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.
- Mandate Event Data Recorders (EDRs) for all new vehicles that could increase accuracy of data as well as the level of understanding of injury causes and injury mechanisms, and in turn can help in evaluation of new road safety technology.
- Support EU Member States in collecting numbers of seriously injured according to the MAIS 3+ definition and include numbers of seriously injured in the EU impact assessment of countermeasures. In a next phase gather data on road user groups, road types, vehicle types involved in collisions resulting in serious injuries.
- Encourage Member States to develop effective emergency notification and collaboration between dispatch centres, fast transport of qualified medical and fire/rescue staff, liaison between services on scene, treatment and stabilisation of the casualty, and prompt rescue and removal to an appropriate health care facility.
- Extend the scope of Directive 2003/59 to professional driver training of drivers of emergency services.
- Promote the widely accepted standard of a ‘casualty centred’ methodology, which ensures a unified approach that promotes optimum casualty care coupled with specific steps to achieve a rapid but safe rescue.
- Set common standards for the creation of emergency corridors and apply them throughout the EU. Drivers need to be aware of how they should react once they find themselves upstream of a road collision.
- Further study the impact of different levels of injuries on quality of life and loss of health and possible lifelong disability.

\textsuperscript{82} ETSC (2019) REVIVE Improving Post-Collision Response and Emergency Care in Europe.
New Mobility Patterns and Demographic Change

Change of Mobility Patterns: More walking and cycling

As active travel is being encouraged for health, environmental, congestion and other reasons, the safety of walking and cycling must be addressed urgently. The new strategy recognises this trend and that ‘active mobility policies especially in urban areas can be a major game changer in reducing CO₂ emissions, improving air quality and reducing congestion’. Pedestrians killed represented 21% of all road deaths in 2014, the figure for cyclists stood at 8%. The share of deaths of unprotected road users is increasing as car occupants have been the main beneficiaries of improved vehicle safety and other road safety measures. Cyclists and pedestrians are unprotected and are vulnerable in traffic. However there are few actions in the new EU Strategy targeting pedestrians and cyclists specifically.

Priorities for action in the next decade to improve the safety of pedestrians, cyclists and powered two wheelers fall under the three broad headings of infrastructure, vehicle safety and road user behaviour improvements.

Under infrastructure, ETSC is calling for the extension of the instruments of the Infrastructure Safety Directive 2008/96 to all main urban and rural roads, with VRUs in mind.

Within road user behaviour, enforcement should be intensified, especially of speeding, in urban areas where there are high numbers of pedestrians and cyclists. Efforts should also be stepped up in the areas of education and training and raising awareness of safe road use both amongst VRUs and motorised road users.

ETSC recommendations

- Adopt specific targets to reduce deaths of vulnerable road users.
- Intensify co-ordination on enforcement, especially of speeding, in urban areas where there are high numbers of pedestrians and cyclists.
- Extend the application of the instruments of the Road Infrastructure Safety Management (RISM) Directive 2008/96 to cover all EU (co) financed roads, main

---

rural and main urban roads.

- Dedicate funds for cycling, walking and PTW infrastructure under the Connecting Europe Facility (CEF) to support increasing the safety of VRUs.
- Apply minimum safety criteria for supporting VRU infrastructure in an urban context within, for example, EU projects to support Sustainable Urban Mobility Plans at city level.
- Fund, launch and monitor a Safer City Label.
- Include the EuroVelo cycle network as part of the TEN-T and earmark CEF funds for its continued realisation.
- Encourage EU Member States to adopt maximum 30km/h in residential areas and areas where there are high levels of cyclists and pedestrians, or where there could be potential to increase cycling and walking by investing in infrastructure.
- Improve data collection on all collisions, in particular involving vulnerable road users as they are more prone to underreporting. Differentiate in the data different types of electrically-assisted cycles.
- Maintain the current definition of pedelecs – with a designed speed of 25km/h and a pedal-assisted maximum continuous output of 250W which is cut when the vehicle reaches its designed speed.
- Consider the benefit of specific training and testing for S-Pedelec use (up to 45km/h e-bikes).
- Revise standards for testing bicycle helmets to increase the safety standard currently in use to offer high levels of protection.
- Encourage EU Member States to promote helmet wearing among cyclists, without discouraging cycling.

**Urban Mobility & Safe City Award**

ETSC welcomes:

- The proposal to set up a Safe City Challenge or award.
- That the EC will explore road safety aspects of urban mobility planning, also within the research and Innovation Framework Programme.

ETSC recommendations:

- A Safe City Label should be linked to the adoption and monitoring of local road safety targets, developments in urban mobility, infrastructure measures, protection of VRUs and involve adequate funding and monitoring. 87

---

• Create a new EU fund to support Safe City demonstration projects with a safe speed element including, for example, the introduction of 30 km/h limits.  
• Create an indicator for the reporting of use of EU funds on improving urban road safety.
• Integrate road safety and EU road safety targets into the Guidelines of Sustainable Urban Mobility Plans.  
• Recognise the synergies and benefits to road safety in preparing EU guidelines on urban access and on urban logistics.
• Within the context of the Urban Mobility Action Plan, draft guidelines for promoting best practice in traffic calming measures, based upon physical measures and techniques of space-sharing in line with Connected Intelligent Transport Systems developments, to support area-wide urban safety management, in particular when 30km/h zones are introduced.
• Set up a mechanism to monitor and promote best practice in the take up of road safety as a horizontal issue within SUMPs.
• Create a mechanism for co-operation between the Member State Expert Group on Urban Mobility and the High Level Group on Road Safety.
• Encourage EU Member States in identifying national representatives in the Member State Expert Group on Urban Mobility with knowledge on road safety and better engage city representatives in work on road safety.
• Channel EU funds for urban mobility into support for increasing the safety of pedestrians and cyclists as a priority.

Shared forms of individual transport

Many cities in Europe have welcomed an array of new mobility options that have been launched in just the last few years. The ways in which people get around in urban environments are changing rapidly and this is fostered by an emergence of car, e-bicycle and e-scooter sharing schemes, growing uptake of active modes of travel and an increasing use of new delivery and transport services. These changes might have a

---

89 Ibid
90 Ibid
91 Ibid
92 ETSC (2014), Integrating safety into the EU’s urban transport policy. ETSC’s reponse to the EC’s Urban Mobility package, https://bit.ly/2i7J1dQ
93 Ibid
profound effect on urban mobility and urban road safety. The EC’s strategy recognises how they enrich the mobility mix in cities but that safety must be ensured.

ETSC welcomes:

✓ That the EC will explore road safety aspects of new business models in personal transport also within the research and Innovation Framework Programme.

✓ That the EC is currently facilitating the exchange of experience between Member State authorities and is considering how to ensure a safe framework for the use of shared electric, conventional bicycles and electric scooters.

ETSC recommendations:

- Conduct research on the road safety implications of e-scooters and electrically assisted cycles including infrastructure needs.
- Consider developing guidance on managing safety aspects of personal e-transporters based on existing European best practice.
- Update the CARE database requirements to be able to identify the collisions involving an e-scooter or electrically-assisted cycles.

Demographic Change and People with Reduced Mobility

The EU Strategy recognises the need for safe mobility to be inclusive to cater for the needs of people with reduced mobility and the elderly, but does not present any areas for action.

ETSC recommendations:

- Encouraging the design of new vehicles, or adapting vehicles for persons with reduced mobility.
- Encouraging elderly-friendly design of new vehicles as well as evaluating the impact of new technologies on older drivers.
- Within infrastructure design: support common EU curricula for auditors and inspectors, including specific training on the needs of the elderly and road users with reduced mobility.

Work-Related Road Safety

---

ETSC welcomes:

- The EC will explore road safety aspects of safety at work with relevance in particular for hauliers and other transport-related businesses. However, this should apply to all employers.

ETSC recommends:

- The EC to do more to ensure application of existing legislation. Duty of care, OSH and road safety compliance are legal necessities in all EU member states and employers must take them into consideration. The EU Directive 89/391/EEC on health and safety of workers requires every employer in Europe to undertake a risk assessment according to the principle of prevention.

**Powered Two Wheelers (PTWs)**

Powered Two Wheelers (PTWs) represent 17% of the total number of road deaths while accounting for only 2% of the total kilometres driven. However, big disparities exist between countries. Given these high collision rates, the EU should prioritise more action in improving their safety in the next decade than is currently foreseen in their strategy.

ETSC recommendations:

- Under infrastructure, extend the instruments of the Infrastructure Safety Directive 2008/96 to all main urban and rural roads with PTWs in mind. With the new guidelines, installation of road equipment including protective systems and improved maintenance could reduce the number of PTW collisions in many EU Member States. The guidelines should be based on independent research.

- Support the setting up of a European helmet and protective clothing consumer information scheme, providing independent consumer information on the safety performances of the most popular helmets and protective clothing sold in the EU including information on durability and required maintenance.

- Introduce a new concept for improved conspicuity for PTWers, this could include a new vertical lighting scheme which is also automatically on regardless of the time of day.

- Consider the practical application of mandating the fitment of overrideable

---

96 ETSC (2011) 5th Road Safety PIN report, Chapter 2, Unprotected road users left behind in efforts to reduce road deaths, [https://goo.gl/zxCfzx](https://goo.gl/zxCfzx)


Intelligent Speed Assistance systems on motorcycles\(^9\). 

- Mandate Anti-Lock Braking systems for all category of motorcycles.
- Evaluate the impact of distraction of riders from new technologies, communication tools including mobile phones and infotainment and come up with countermeasures.
- Increase awareness of other road users of PTWers and risks of distraction in driver training and road safety awareness campaigns.
- Introduce a regular mandatory roadworthiness test for PTWs.
- Introduce hazard perception training; expand formal training to cover riding style including risk awareness and perception as well as skills (as mentioned in the Driving Licence section).
- Develop standards for trainer’s education and periodic retraining which reflect the aforementioned content on risk awareness.
- Make theoretical and practical training as well as a practical test mandatory to obtain an AM driving licence and establish minimum standards for theoretical and practical training for AM and other categories of PTW.
- Prioritise support for improving PTW safety in the EC’s research programme.

\(^9\) ISA is a vehicle safety technology already available on several models of new car in EU showrooms. ETSC is calling for ISA systems that use a sign-recognition video camera and a GPS-linked speed limit database to help drivers keep to the current speed limit. Such a system will limit engine power when necessary to help prevent the driver from exceeding the current speed limit. The system can be overridden, or temporarily switched off. As well as improving road safety, reducing emissions and saving fuel, the system can help drivers avoid speeding fines. [https://etsc.eu/briefing-intelligent-speed-assistance-isa/]
The Wider Global Picture and the EU’s Role

Globally, each year, nearly 1.3 million people die as a result of a road traffic collision: 90% of road deaths occur in low- and middle-income countries, which claim less than half the world’s registered vehicle fleet.

ETSC welcomes:

- Further developing road safety cooperation with the EU’s neighbours and further afield with countries in Africa, in particular by sharing best practice and supporting capacity building including the new KPIs and management approach in the 2021-2030 framework.

- Exploring how to cooperate with international financing initiatives such as the UN Road Safety Trust Fund.

- The EC’s active participation in preparing the Global Ministerial Conference on Road Safety in Stockholm in 2020 and support for an ambitious new global medium term target.

- The intention to investigate linkage of road safety objectives with other development goals as regards sustainability and human health within the global context.

- The commitment to analyse how the EU Research and Innovation Framework Programme Horizon Europe can contribute to radically improve road safety in developing countries.

ETSC recommendations:

- Show strong political leadership at an international level in reaching global targets set at UN level.\(^{100}\)

- As the world’s biggest aid donor, ensure that EU road safety policy objectives apply to external programming.

---

Annex – Key Performance Indicators (KPI)

ETSC’s further recommendations on the EC annex: List of KPIs and basic methodology

In its staff working document, the European Commission states that “to measure progress, the most basic - and important- indicators are of course the results on deaths and serious injuries” [...] but “the Safe System approach relies on gaining a much clearer understanding of the different issues that influence overall safety performance.” The European Commission is therefore asking Member States to voluntarily collect a set of data to produce comparable KPI, bearing in mind the differences in national rules.

ETSC strongly supports the inclusion of the eight new KPIs. Key Performance Indicators (KPIs) can give a more complete picture of the level of road safety and can detect the emergence of problems at an earlier stage. ETSC has been running its Road Safety Performance Index (PIN) programme since 2006 (www.etsc.eu/PIN), gaining extensive experience of collecting data, building indicators and presenting the results.

This annex presents ETSC’s comments on the minimum methodological requirements set in the annex of the staff working document by the EC and recommendations to improve and extend the current list of KPIs.

ETSC recommendations:

- When presenting KPI data, aim to collect data to produce two indicators for each KPI:
  - One indicator of progress over time (e.g. in country x seat belt wearing rates improved by x % in 2024 compared to 2021).
  - One indicator of outcome (e.g. in country x seat belt wearing rates are x%).
- 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).
- In cooperation with Member States, develop common data collection methodologies for each KPI based on the best national practices, building on the work of the SafetyNet project, to move towards comparable data.
- Publish updated data regularly, at least every two years ahead of the conference.

---

1. Speed

ETSC welcomes:

✓ The KPI on percentage of vehicles travelling within the speed limit.

The European Commission’s minimum methodological requirements on the speed KPI advise to collect data on vehicle speed by vehicle and road type.

ETSC recommends to collect data by vehicle type and maximum legal speed limit (road types are not enough). Countries have different legal speed limits, even on the same road type. Therefore, the EC should present speed SPI data based on the legal maximum speed limit (e.g. groups of countries that have 70 km/h legal speed limit on rural roads should be presented in one figure, countries with 80 km/h in a separate figure etc.). The figures should reflect changes in speed compliance over time. To illustrate, examples from the ETSC’s PIN Flash report 36 Reducing Speeding in Europe\textsuperscript{103} are presented below (Fig.2 and 3).

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{speed-compliance.png}
\caption{Proportion (in %) of observed car and van speeds higher than the speed limit on rural non-motorway roads with a speed limit of 70 km/h since 2007 until the latest available year based on countries’ individual data collection methodologies.\textsuperscript{104}}
\end{figure}

\textsuperscript{104}N.b. here ETSC checks vehicles above the speed limit, the EC will present it differently - vehicles within the speed limit
Figure 3. Proportion (in %) of observed car and van speeds higher than the speed limit on rural non-motorway roads with a speed limit of 80 km/h since 2007 until the latest available year based on countries’ individual data collection methodologies.\textsuperscript{105}

It has to also be acknowledged that this KPI has limitations. While the current speed KPI can track individual Member State progress in bringing drivers to the legal speed limit, current data between countries are not comparable due to differences in data collection methodologies as well as differences in legal speed limits. In countries with lower legal speed limits, levels of observed vehicles going above the speed limit could be higher than in those countries where roads have similar design characteristics but higher speed limits.\textsuperscript{106}

Therefore, the European Commission should work together with the Member States towards defining a criteria for the safety and credibility of speed limit and introduce a KPI on the proportion of roads within the road network with speed limits set at safe and credible levels. Such new indicator would address road authorities whose responsibility is to make sure that legal speed limits are safe and credible which is a pre-requisite for implementation of the Safe System approach.\textsuperscript{107}

\textsuperscript{105} N.b. here ETSC checks vehicles above the speed limit, the EC will present it differently - vehicles within the speed limit.
ETSC recommendations:

- Track Member State progress in increasing the levels of speed compliance by road type and different legal speed limits over the period 2021-2030.
- Present Member State speed KPI data based on the legal speed limits (i.e. separate graphs per speed limit).
- Work towards defining a criteria for the safety and credibility of speed limits.
- Introduce a KPI on the proportion of roads within the road network with speed limits set at safe and credible levels (e.g. 30 km/h in areas with a lot of vulnerable road users).  

2. Seatbelts and child restraints

ETSC welcomes:

✓ % of vehicle occupants using the safety belt or child restraint system correctly.

ETSC recommends:

The seatbelt remains the single most effective safety feature in vehicles. Even though seatbelt wearing rates have improved in the EU, the proportion of killed vehicle occupants who were not wearing their seatbelt is disproportionately high. According to a PACTS report, 27% of those who died in cars in Great Britain in 2017 were not wearing a seatbelt.

ETSC collected data on vehicle occupants killed not wearing a seatbelt on motorways (see Table 1): the figure ranges from 23% in France to 61% in Belgium. Thus, in addition to seatbelt wearing rates, it is important to include a KPI on vehicle occupants killed not wearing seatbelts or child restraints to identify the actual scope of the problem and take appropriate measures.

Table 1: Percentage of people killed on motorways not wearing a seatbelt and car occupant seat belt wearing rates on motorways in some countries.\textsuperscript{111}

Child restraint installation mistakes can drastically reduce the effectiveness of a child restraint system. Data show that up to 70\% of children travelling in cars in some of the European countries are restrained incorrectly or do not have an appropriate restraint system for the age or the height.\textsuperscript{112}

The European Commission’s minimum methodological requirements on seatbelts and child restraints suggest data to be collected through observations. While the observation method is appropriate for estimating seatbelt wearing rates, a vehicle has to be stopped in order to evaluate if an appropriate child restraint system is used and if it is used correctly.

ETSC recommendations:

- Complement the indicator of % of vehicle occupants using the seatbelt with the indicator on proportion of vehicle occupants killed without wearing a seatbelt or child restraint system (results shown separately).
- Ask Member States to collect data on % of child occupants in cars correctly restrained, checks performed in a parking space (or a rest area on a motorway).

\textsuperscript{111} ibidem
3. Protective equipment

ETSC welcomes:

✓ the KPI on % of riders of powered-two-wheelers and bicycles wearing helmets.

ETSC recommends:

These indicators should be complemented with another one, to be developed, on infrastructure safety for vulnerable road users. The European Commission, together with the Member States, should explore and develop a KPI on infrastructure related to pedestrian, cyclist and PTW safety.113

To estimate the road risks vulnerable road users are facing compared to other traffic, exposure data on km travelled should also be collected.

ETSC recommendations:

- Together with the Member States, develop a KPI on pedestrian, cyclist and PTW infrastructure safety.
- Collect exposure data for all road users (pedestrians, cyclists, PTWs, cars, vans, HGVs) by road types.

4. Driving under the influence of alcohol

ETSC welcomes:

✓ A KPI on % of drivers driving within the legal limit for blood alcohol content (BAC).

The European Commission’s minimum methodological requirements on driving under the influence of alcohol suggest three data collection options. Random breath testing outside enforcement actions is the preferred option by the EC. If random breath testing outside enforcement activity is not possible, the EC suggests that Member States choose to either use breath testing results from enforcement actions and/or use data from self-reported anonymous surveys.114

The most accurate data source on driving within the legal BAC limit is police roadside checks. Currently at least 12 EU countries gather data on the proportion of drivers within the legal BAC limit out of all drivers checked countrywide based, on police roadside checks.

---

113 E.g. Sweden introduced a KPI on share of municipalities with good-quality maintenance of pedestrian and cycle paths.

breath-test results. Thus, the European Commission should strongly encourage countries to use data based on police roadside checks rather than self-reported behaviour.

Table 2. Roadside alcohol breath tests per 1000 inhabitants and proportion of those tested found to be above the legal limit.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>EE</td>
<td>677</td>
<td>0.9%</td>
<td>572</td>
<td>1.0%</td>
<td>470</td>
<td>1.3%</td>
</tr>
<tr>
<td>PL</td>
<td>466</td>
<td>0.7%</td>
<td>405</td>
<td>0.9%</td>
<td>234</td>
<td>1.8%</td>
</tr>
<tr>
<td>FI</td>
<td>279</td>
<td>1.0%</td>
<td>286</td>
<td>0.9%</td>
<td>149</td>
<td>1.5%</td>
</tr>
<tr>
<td>AT</td>
<td>189</td>
<td>1.6%</td>
<td>214</td>
<td>1.8%</td>
<td>209</td>
<td>2.0%</td>
</tr>
<tr>
<td>SI</td>
<td>156</td>
<td>3.6%</td>
<td>186</td>
<td>3.6%</td>
<td>184</td>
<td>3.7%</td>
</tr>
<tr>
<td>EL</td>
<td>n/a</td>
<td>166</td>
<td>1.6%</td>
<td>163</td>
<td>1.7%</td>
<td>156</td>
</tr>
<tr>
<td>FR</td>
<td>152</td>
<td>2.9%</td>
<td>164</td>
<td>2.9%</td>
<td>160</td>
<td>3.1%</td>
</tr>
<tr>
<td>HU</td>
<td>135</td>
<td>1.5%</td>
<td>124</td>
<td>1.9%</td>
<td>121</td>
<td>1.9%</td>
</tr>
<tr>
<td>CY</td>
<td>135</td>
<td>7.0%</td>
<td>138</td>
<td>6.7%</td>
<td>146</td>
<td>7.2%</td>
</tr>
<tr>
<td>SE</td>
<td>130</td>
<td>1.0%</td>
<td>205</td>
<td>0.6%</td>
<td>234</td>
<td>0.6%</td>
</tr>
<tr>
<td>RO</td>
<td>72</td>
<td>1.8%</td>
<td>73</td>
<td>1.6%</td>
<td>75</td>
<td>1.0%</td>
</tr>
<tr>
<td>IE***</td>
<td>71</td>
<td>n/a</td>
<td>86</td>
<td>n/a</td>
<td>96</td>
<td>n/a</td>
</tr>
<tr>
<td>LT</td>
<td>48</td>
<td>1.8%</td>
<td>52</td>
<td>1.9%</td>
<td>55</td>
<td>2.2%</td>
</tr>
</tbody>
</table>

It is estimated that 1.5 to 2% of kilometres travelled in the EU are driven with an illegal Blood Alcohol Concentration (BAC), but around 25% of all road deaths in the EU are alcohol related. Thus, in addition to % of driver within the legal BAC, it is important to include a KPI on road deaths attributed to alcohol. Levels of deaths attributed to drink-driving cannot be compared between countries, as there are large differences in the way in which countries define and record a ‘road death attributed to drink driving. However, countries can be compared on the basis of developments in deaths attributed to drink driving relative to developments in other road deaths. To illustrate, an example from the ETSC’s SMART report “Progress in reducing drink driving in Europe” is presented below (Fig. 4).

---

Figure 4. Difference between the average annual change (%) in the number of road deaths attributed to alcohol and the corresponding reduction for other road deaths over the 2006-2016 period.

ETSC recommendations:

- Improve the formulation of the current driving under the influence of alcohol KPI to: “a KPI on % of drivers driving within the legal BAC limit among drivers that have been breath-tested by the police in roadside checks”.
- Encourage Member States to collect data on drivers driving within the legal BAC limit based on police records instead of self-reported behaviour.
- Introduce a KPI on reduction in the number of alcohol-related road deaths.\(^{119}\)
- Encourage Member States to collect data on alcohol-related road deaths based on the SafetyNet definition.\(^{120}\)

5. Distraction by handheld devices

ETSC welcomes:

✓ A KPI on percentage of drivers not using a handheld mobile device.

ETSC recommendation:

\(^{119}\) Using the SafetyNet recommended definition of drink driving: any death occurring as a result of road accident in which any active participant was found with blood alcohol level above the legal limit.

\(^{120}\) SafetyNet definition: any death occurring as a result of a road accident in which any active participant was found with a blood alcohol level above the legal limit.
• Acknowledge that use of handheld mobile devices is just one form of distraction. Among others, hands-free devices are also a source of distraction.

6. Vehicle safety

ETSC welcomes:

✓ A KPI on % of new passenger cars with a Euro NCAP safety ranking equal or above a predefined threshold (e.g. 4-star).

As complimentary vehicle safety KPI, the European Commission proposes to measure the age of the vehicle fleet and roadworthiness data. There are big differences in the age of the vehicle fleet in the Member States which, to a large extent, may be determined by countries’ economic performance and national vehicle taxation policies.

In general, it can be assumed that newer vehicles provide higher safety levels for vehicle occupants and those outside the vehicle. Yet, it has to be recognised that safety levels of new passenger cars on the market vary.

The policy behind the vehicle safety indicator should aim to encourage road users who decided to buy a new passenger car to choose the safest vehicle available on the market – a 5-star Euro NCAP tested car.

Within the vehicle safety KPI, it is useful to collect data on new passenger cars sold that are ranked with 2-3-4-5 Euro NCAP stars as well as data about not-tested vehicles. To illustrate, an example from the ETSC’s PIN Flash report “How safe are new cars sold in the EU? An analysis of the market penetration of Euro NCAP-rated cars” is presented below (Fig. 5).

---

ETSC recommendation:

- Improve the formulation of the current vehicle safety KPI to: “a KPI on % of 2-3-4-5 star Euro NCAP tested cars as well as not-tested cars among new passenger cars sold in the latest year”.

---

7. Infrastructure safety

ETSC welcomes:

- The EC commitment to work further on developing a KPI on percentage of distance driven over roads with a safety rating above an agreed threshold.

- A temporary indicator on percentage of distance driven over roads with or without opposite traffic separation (by barriers or area) or with a speed limit equal to or lower than xx km/h (limit left to the discretion of MS) in relation to total distance travelled.

Within the Safe System approach, the KPI on infrastructure should be viewed as one of the most important KPIs, thus ETSC regrets that this one is still not final. When determining the infrastructure indicator, synergies with the EU infrastructure safety management directive should be applied.

ETSC recommendation:

- Introduce a KPI on percentage of distance travelled in the Member States on the roads that meet the standards of the infrastructure safety management directive.

8. Post-crash care

ETSC welcomes:

- A KPI on 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 (to the value of the 95th percentile).

9. ETSC recommendations for additional KPIs

As work on KPIs is still in progress and the European Commission acknowledges that additional KPIs can be introduced in the future, ETSC suggest to add KPIs on traffic law enforcement and work-related road safety.

Enforcement

Exceeding speed limits, drink, drug or distracted driving and failure to wear a seatbelt are still the leading causes of death and serious injury on European roads. Despite legislation designed to prevent all four, many drivers involved in fatal traffic collisions clearly failed
to comply with one or more road traffic laws at the time of their collision.\textsuperscript{123}

ETSC recommendation:

- Introduce a KPI on a number of checks performed by the police and safety cameras (where applicable) in the priority areas of speeding, drink and drug driving (separately), illegal use of mobile devices, seat belt, child restraint and helmet use.

Work-related road safety

Up to 70\% of all road deaths in the EU are work-related.\textsuperscript{124} Having in mind the scope of the problem, an introduction of a KPI on work-related road safety should be considered - work-related road safety has a huge potential in improving overall road safety.

ETSC recommendation:

- Introduce a KPI on proportion of fatal work-related road collisions within the framework of the road safety field that covers road deaths among professional road users, commuters, third parties and workers on the roads and covers all road user groups; allowing for a breakdown of professional road users, commuters, road workers and third party deaths.


The European Transport Safety Council (ETSC) is a Brussels-based independent non-profit making organisation dedicated to reducing the numbers of deaths and injuries in transport in Europe.