View on the EU Road Safety Policy Framework 2021-2030



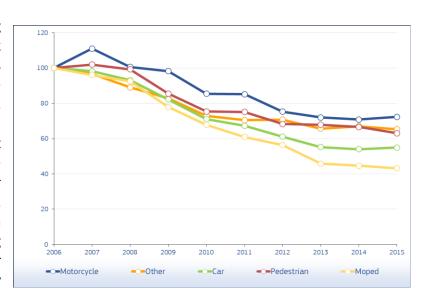
1. Executive summary

The EU Road Safety Policy Framework 2021-2030¹ has a large impact on all road users. As an organization that represents the motorcyclists in Europe, we consider this policy insufficiently tailored to motorcyclists and other users of L-category vehicles. Assumptions, plans and key performance indicators are very much focussed on cars and do not sufficiently take other road users into account. In this document we explain why the EU Road Safety Policy Framework 2021-2030 fails in protecting motorcyclists and how it could be improved. On all four pillars of the framework, (1) infrastructure safety, (2) vehicle safety, (3) safe road use including speed, alcohol and drugs, distraction, and the use of protective equipment, and (4) emergency response, it neglects motorcyclists and other users of L-category vehicles. On all four pillars we provide suggestions for enhancements.

2. Introduction

FEMA puts a high value on road safety. As a motorcyclists' interest federation, we consider road safety as one of our core focus issues.

Motorcycles are balancing vehicles which bring extra risk of accidents and motorcyclists do not have a protective cage as other vehicle drivers have, which brings extra risks when accidents happen. In most cases where motorcyclists are involved in accidents, other road users are involved too, and, in most cases, the main cause of the accident is acting (or not acting) by the other road user. It was already stated in the **DEKRA** Motorcycle Road Safety Report 2010²: "Irrespective of



1 index of motorcycle and moped fatalities compared with other modes of transport (www.erso.eu)

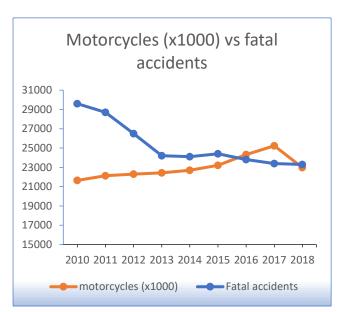
EU Member State, up to two thirds of all motorcycle accidents involving two or more parties are not caused by the motorcyclists themselves" (p.17). According to the same report, the single accidents in which motorcyclists were hurt, was 25.6%. This means that in a majority of

¹ https://ec.europa.eu/transport/themes/strategies/news/2019-06-19-vision-zero_en_

² https://www.dekra-roadsafety.com/media/dekra-vsr-2010-eng.pdf

the accidents in which motorcyclists are involved the accidents are caused by other road users, mostly car drivers. These numbers are in line with those of the MAIDS³ and SaferWheels⁴ reports. Although behaviour can be seen as the main accident causation, other circumstances play a role as well: design and maintenance of the road infrastructure (including objects that block the sight on the road, crossroads, exits, etcetera), design and maintenance of the vehicle, the weather. The effects of crashes can be limited by better design of the motorcycle and by personal protection equipment like crash helmets, gloves, boots, good riding gear with impact protection and additional protection in the form of neck-braces, back-protectors, and airbag vests. All these elements have been enhanced during the years and this is still going on, but they will never provide the protection that is possible in a car with a protective cage, seatbelts and airbags. In the post-crash phase, the consequences of accidents can be reduced by a quick respond from the emergency services. ECall could play an important role here. For this reason, manufacturers are working on eCall for motorcycles. All this leads to the observation that the decline in accidents leading to fatalities and serious injuries is less than with cars, although a clear decrease can be seen, as is shown in figure 1.

When related to the growth in motorcycles, the decline of fatal motorcycle accidents is significant, although it has become less since 2013 (figure 2).



2 Motorcycle market versus fatal accidents EU27 2010-2018

Compared to cars, the number of fatal and serious injury accidents with motorcyclists is still large. Fatalities and serious injuries do not only have an enormous impact on the victim, but also on society. According to Dutch road safety research organization SWOV⁵, the costs of a fatal accident for the society are about €2.8 million per road death and more than €300,000 per serious road injury. For this reason, additional measures are needed to lower the accident figures and especially accidents that lead to death or serious injuries.

In the Commission Staff Working Document EU Road Safety Policy Framework 2021-2030 - Next steps

towards "Vision Zero", the European Commission presents a 'new approach'. This is described as a need to take hold of the mindset of 'Vision Zero', implementation of the 'Safe System' at EU level and a readiness to confront new trends, such as distraction by mobile devices, connectivity and automation, and a sharing economy. These ideas are worked out further in the EU Road Safety Policy Framework 2021-2030. In the words of the European Commission: "According to the Safe System approach, death and serious injury in road collisions are not an inevitable price to be paid for mobility. While collisions will continue to occur, death and serious

³ http://www.maids-study.eu/

 $^{^{4} \}underline{\text{https://op.europa.eu/en/publication-detail/-/publication/8eddd110-c52a-11e8-9424-01aa75ed71a1/language-en}$

⁵ https://www.swov.nl/en/facts-figures/factsheet/road-crash-costs

injury are largely preventable. The Safe System approach aims for a more forgiving road system. It accepts that people will make mistakes and argues for a layered combination of measures to prevent people from dying from these mistakes by taking the physics of human vulnerability into account. Better vehicle construction, improved road infrastructure, lower speeds for example all have the capacity to reduce the impact of crashes." We have a different approach and do not only want to reduce accidents that lead to fatalities or serious injuries, but we want to avoid crashes at all. The more so, because a system that reduces the risk of fatalities or serious injuries for car drivers does not necessarily mean that it also reduces the risk of fatalities or serious injuries for motorcyclists and when it does, it comes with extreme restrictions for motorcyclists.

3. Infrastructure – safe roads and roadsides

Infrastructure is an important factor in both the cause and the consequences of accidents in which motorcyclists are involved.

Motorcycles, as balancing vehicles, are more sensible to potholes, bumps, slippery spots (for example, worn and often unnecessary road markings) and dirt on the road than fourwheeled vehicles. There is a larger risk of losing balance. Also, because motorcycles are smaller than cars, they are hidden behind obstacles on or near the road easier than cars. Even lamp posts can hide a motorcycle from the view of other road users. Consequently, because of the absence of a



 $\it 3$ A dangerous road situation for motorcyclists (photo: Dolf Willigers)

protective cage, motorcyclists are less protected when the motorcycle crashes into an obstacle. This could be a tree, a lamppost, a control box near the road, fences and last but certainly not least, any kind of road restraint system. Especially wire-rope barriers and rigid steel barriers without a motorcycle protection system can be lethal for motorcyclists. This is also, or perhaps even more, the case when the rider has fallen off the motorcycle after a crash or after losing balance.

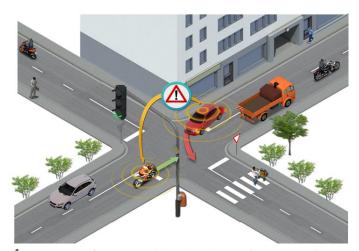
Therefore, motorcyclists need smooth roads and obstacle free roadsides. In this, the qualification for a safe road for a motorcyclist is often different than for a car driver. We certainly do not share the Commissions ideas about 'forgiving' roads. Roads with median barriers (often wire-rope or cable barriers) that are fitted close to the lanes, often within 35 centimetres of the roadway and without any motorcyclist protection system, cannot be seen as safe for all road users. In the plans of the European Commission, we do not see much that will benefit the road safety of motorcyclists, to the contrary, powered two-wheelers seem not to have been in the mind of the commission.

The KPI (key performance indicator) for infrastructure – *Percentage of distance driven over roads with a safety rating above an agreed threshold* - that is formulated by the Commission must include motorcycles.

4. Safe vehicles

A safe vehicle is a vehicle that helps the driver or rider to avoid accidents and reduces the consequences in case of an accident by protecting the passengers against the impact of a crash.

A safe vehicle is a well-maintained vehicle. For this reason, the European Parliament has suggested the European Commission to include motorcycles with a displacement of more than 125cc into the scope of Directive EU/2014/46 and assess the costs and benefits of having a mandatory European periodic technical inspection for motorcycles up to 125cc displacement and mopeds. Several studies have proven that the technical state of powered two-wheelers play a negligible role in the causation of accidents. Therefore, FEMA does not support a mandatory periodic technical inspection for powered two-wheelers.



4 An example of a connected based application (picture: <u>CMC</u>)

A safe vehicle is a vehicle that is fitted with applications that can avoid crashes with other vehicles. In the case of motorcycles, it is important that these applications are as little intrusive as possible. Sensors, especially cameras, function less well in bad weather conditions and need to be positioned very carefully and stay in the right position. This can lead to high maintenance costs and expensive realignments, even after relatively small impacts. Also, the initial costs of sensors and the applications that depend on

them, can be high in relation to the costs of the motorcycle. Applications that have an impact on the speed or the direction of the motorcycle have an impact on the dynamics of the motorcycle, even with the risk of unbalance. This observation leads to the conclusion that suitable applications that would mainly be applications that connect the motorcycle with other vehicles. Examples of this are Motorcycle Approach Warning (MAW), Forward Collision Warning (FCW), Left Turn Assist (LTA), Approaching Emergency Vehicle Warning (AEVW) and Broken-Down Vehicle Warning (BDVW).

We believe that digital connection of motorcycles with infrastructure and other vehicles is a very effective and the least intrusive way to make motorcycling safer in an environment that is becoming more automated and connected. It is for this reason that FEMA actively and

officially supports the Connected Motorcycle Consortium (CMC)⁶ that works on the development of applications and standards that make use of digital connection.

In the plans for vehicle safety as formulated by the Commission, we miss powered two-wheelers. The KPI for vehicle safety – *Percentage of new passenger cars with a Euro NCAP safety rating equal or above a predefined threshold (e.g. 4-star) - to be specified further -* ignores vehicle safety for powered two-wheelers. We invite the European Commission to also develop a KPI for vehicle safety that is focussed on powered two-wheelers and other L-category vehicles.

5. Safe road use

The third pillar of road safety as defined by the Commission is safe road use, which includes speed, driving without alcohol and drugs, undistracted driving, safety belt and child restraint use and helmet use. This part of the Commission's policy is very much focussed on enforcement, because in the words of the Commission "The focus on general education and awareness has been shown to be generally less effective and has less prominence in modern Safe System approaches, but driver licensing, targeted education and awareness raising, supported by strong and sustained compliance and enforcement regimes, all have an important role to play in giving road users the capability and willingness to use roads and vehicles safely". It is not clear on what scientific evidence this conclusion is based. We are of the opinion that road safety starts with proper initial training and testing. In the present Driving Licence Directive⁷ the focus is on low-speed technical skills that have little to



5 Low speed skills motorcycle training (photo: Dolf Willigers)

do with road safety, instead of a focus on higher level skills (higher level skills are those which go beyond acquiring basic knowledge and understanding and being able to apply that understanding to straightforward situations) that are needed to assess the road and traffic situation and act properly to avoid dangerous situations that can lead to accidents. Therefore, we advocate a change of focus in the driving licence test legislation from testing low speed skills to higher level skills.

As to the plans of the European Commission, we support the intention to update the UNECE regulation concerning safety belt reminders, a more effective cross-border enforcement on traffic offences, stricter limits on blood alcohol content for professional drivers and/or novice

⁶ https://www.cmc-info.net/

⁷ https://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX%3A32006L0126

drivers. Concerning the possible revision of the present European driving licence directive, we are of the opinion that the Commission should use the opportunity to abolish the stepped entry to the A-licence or at least set it up in such a way that it does not form an additional threshold for new motorcyclists and, as written above, the focus must be on higher level skills.

Concerning the key performance indicators, the Commission has drafted several KPIs concerning safe road use.

- The KPI for speed: *Percentage of vehicles travelling within the speed limit.* Speed limits have several functions and road safety is one of them. Other reasons to introduce a speed limit can be noise annoyance, air pollution, traffic flow, etcetera. Furthermore, different member states have very different speed limits on comparable roads. Finally, there is a difference between speed limits and safe speeds. The latter can be much lower, depending on the local situation, traffic situation, weather, vehicle. To connect speed limit to safe speed and base a KPI on that is not logical for us.
- The KPI for sober driving: *Percentage of drivers driving within the legal limit for blood alcohol content (BAC).* Although this seems a logical KPI, again legal limits differ per member state and per category of driver.
- The KPI for driver distraction: Percentage of drivers not using a handheld mobile device.
 Mobile devices are used for many purposes in cars. They can be used for navigation purposes, to call, to write text messages and even to play games. This can all be done, and is done, hands-free. The KPI does not give a good view of distraction by mobile devices.
- The KPI for the use of safety belts and child restraint systems: Percentage of vehicle occupants using the safety belt or child restraint system correctly. The correct use of safety belts and child restraint systems is essential to avoid fatalities and severe injuries after an accident, but do not contribute to the avoidance of an accident. In the 'Vision Zero' approach this KPI may be logical, for us it is less obvious, because the correct use of safety belts and child restraint systems does not avoid any accidents.
- The KPI for protective equipment: *Percentage of riders of powered two-wheelers and of cyclists wearing a protective helmet.* We are of the opinion that the latter may not be the most logical KPI. Especially the combination of the (in most cases) mandatory crash helmet usage for riders of powered two-wheelers and the (in most cases) voluntary use of helmets for cyclists will give a distorted picture. we have no objections to them.

6. Emergency response

Effective post-crash care, including fast transport to the correct facility by qualified personnel, reduces the consequences of injuries. The possibility exists that a driver or a rider who suffered an accident is not capable, for whatever reason, to call the emergency room. This can

even happen in densely populated areas, especially during the night. It can take up to days before the crashed driver or rider is found. For this reason, we support eCall for all vehicles, including motorcycles. ECall for motorcycles requires different techniques than that for cars and motorcycle accidents often differ from car accidents. Especially the fact that the rider and a



car accidents. Especially the 6 BMW already fits e-Call (optional) on some motorcycles (photo: BMW Motorrad)

possible passenger often get separated from the vehicle by sometimes even quite large distances, makes the design of a well-functioning eCall device for motorcycles very challenging. Too many false calls will lead to incredibility at the emergency rooms. We do support the implementation of an eCall system for motorcycles, but it must be reliable. We also support the Commission's plans to facilitate closer contacts between road safety authorities and the health sector to assess further practical and research needs.

About the key performance indicator for post-crash care: 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 emergency services, we would like to see this KPI be used for crashes with all vehicles, not only for cars.

7. Conclusion

The road safety policy of the European Commission is based on the 'Vision Zero' doctrine that was developed by the Swedish authorities. This doctrine and the resulting 'Safe System' approach is very much focussed on cars. What this means in practice is visible on Swedish roads where motorcyclists often feel very uncomfortable and unsafe. FEMA can and will not support an approach that is not safe for all road users, including users of powered two-wheelers. We call upon the European Parliament, the Commission, and the Council to include motorcyclists and other users of L-category vehicles in the road safety policy in a way that is not restrictive for these road users. Powered two-wheelers and other L-category vehicles can play a large role in reducing both city congestions and the space that is taken by individual motorized transport modes. Motorcyclists deserve a full role in road safety policy.