



Joint position statement FEMA and FIM Europe

Background to this statement:

OECD (the Organisation for Economic Cooperation and Development) is an inter-governmental organisation, with its headquarters in Paris, France. OECD reports carry great prestige as they are known for their high quality. They have a major influence on policy making by governments and other organisations, for example the European Union.

ITF (the International Transport Forum) at the OECD is an inter-governmental organisation with 54 member countries. It acts as a strategic think tank with the objective of helping shape the transport policy agenda on a global level. The ITF organises an annual summit of ministers along with leading representatives from industry, civil society and academia.

In 2008 OECD-ITF hosted a conference on motorcycling and safety in the Norwegian town of Lillehammer. This event was co organised by FEMA. FIM was in attendance also, as were representatives from motorcycling organisations across the world.

Following the event in Norway, OECD-ITF decided to use the 19 statements that came out of the conference as basis for a comprehensive report on motorcycle safety. A working group with experts representing 18 OECD and ITF countries was established.

In 2014 the process came to a conclusion and in July FEMA and FIM Europe were invited to comment on the final draft. Both organisations found the comprehensive 200 pages expert draft report important and likely to heavily influence the global motorcycle safety work in the years to come.

In the draft report FEMA and FIM Europe have identified seven major areas of great importance that are in accordance with the positions of the riders' organisations in Europe and elsewhere. The following recommendations and statements are extracts taken verbatim from the OECD-ITF draft report on the safety of powered two-wheelers and constitutes a common platform for cooperation between FEMA and FIM Europe:

1. MOBILITY

PTWs are becoming an important component of the transport system and therefore need to be properly integrated into mobility plans.

The powered two-wheeler population (which includes motorcycles, scooters and mopeds) has been constantly increasing and plays a significant role in mobility in many countries, particularly in many of the world's large cities.

In many cities, PTWs have become a real alternative to passenger cars given the level of traffic congestion. PTWs indeed present a number of advantages including flexibility, reliability of travel time, and lower cost of use compared to a private car.



In summary, PTWs play a major role in transport for various reasons in different locations. They represent an opportunity to improve mobility, in conjunction with public transport, in many cities suffering from significant congestion and parking challenges. They constitute an integral part of the traffic system, potentially able to meet important future needs in society.

2. TRAINING

Novice riders of every kind of PTW should be trained.

Even more than for driving a car, riding a PTW requires technical skills. Novice riders of every kind of PTW should be trained. Training should not only focus on basic manoeuvring skills and mastering traffic situations, but also address attitudes towards safety, putting a special emphasis on hazard perception and defensive riding.

It is, however, worth noticing that a very restrictive and complicated motorcycle licensing system might result in delinquency by some riders while unnecessarily complicating the process.

The curricula for training and education of drivers in all other vehicle categories should also focus on risk awareness when dealing with PTWs, their vulnerability, and crash patterns.

The instructor's competence and attitude towards road safety are critical. There should be minimum competence requirements for instructors according to the training they provide. The requirements could be on the instructors' own riding competence, and their pedagogical competence e.g. competence in coaching. It is important that the driving instructors' education is developed so that they can fulfil the intention of the curriculum.

While there is little scientific evidence, it is likely that well-designed post-licence training courses focused on refreshing basic manoeuvring skills and risk awareness can be useful to some riders (for example the "returning" riders).

3. AWARENESS

Perception and awareness of PTWs by other road users have been recognized as part of the critical points characterizing the problems of interaction of these vehicles within the traffic system.

In situations where a car driver fails to give way to a PTW rider, the car driver often admits having looked in the direction of the motorcyclist prior to manoeuvring, but not having seen the rider who was theoretically visible. "Fail to look" and "look but fail to see" are the two main categories of perceptual errors that contribute to crashes.

Regarding high visibility clothing, research shows different results regarding their effectiveness in reducing conspicuity related crashes, depending on time and location. In short, when riding through highly dense traffic, a rider should wear bright clothing. When riding mostly in open-space (cruising) a rider is better off wearing darker clothing. At night reflective clothing is more effective.

4. INFRASTRUCTURE

The road environment has a significant influence on the risk of crashes involving PTWs.

The road environment has a significant influence on the risk of crashes involving PTWs. Contributing factors include: road surface defects (such as unevenness, potholes or debris on the road); presence of slippery material (water, oil) on the road; road markings with insufficient skid resistance or use of raised pavement markers; poor road alignment; presence of obstacles, roadside hazards and safety



barriers, and interaction with other road users (including heavy vehicles, cars, cyclists, pedestrians and other PTWs).

Consequently, the quality of the road layout and adequate traffic management play an important role in helping riders in mastering their vehicles, preventing loss of control, and influencing interactions with the other road users. Infrastructure determines and organizes the way road users interact. The road layout has an important impact on the harmony and efficiency of the interactions between road users, specifically between cars and PTWs drivers. More particularly, it can condition the capacity of car drivers to detect the PTW, and favour a driving speed conducive to safety, both elements recognized as critical in crashes involving PTWs.

It is sometimes more effective to act indirectly on the road infrastructure than directly on the road users. Human behaviour is partly the product of the environment in which humans operate. The road layout will thus have a decisive influence on their activity, whether behavioural or cognitive (psychological).

PTW-friendly road design, maintenance and infrastructure generally benefit all road users. The aim is to ensure that the safety of PTW riders is considered in the design and maintenance of roads and the implementation of traffic management plans.

A consistent road and road environment invite road users to adopt the appropriate behaviour. A self-explaining road allows road users to anticipate changes in the local road context.

When potentially aggressive obstacles in the safety zone cannot be avoided, the last option is to isolate road users from these obstacles by the installation of a vehicle restraint system. However, some of these installations can be extremely aggressive for PTW riders. Guardrails with unprotected posts are a real danger for motorcyclists.

Allowing PTWs to travel in bus lanes is not necessarily a measure to improve safety, but rather to improve traffic flow. It has safety implications, however. Traffic management measures can have a dual purpose: facilitating PTW traffic and increasing safety.

Engineers, road designers and providers, local authorities, road safety auditors and inspectors should be trained to consider PTWs in the design, construction, maintenance and operation of roads, and be provided with the necessary risk assessment tools to make the right decisions.

5. Intelligent Transport Systems

It is essential that the view and needs of the motorcyclists be properly understood and researched and this knowledge be used to develop the design of ITS devices, which are acceptable to them.

Safety research addressing the development and application of ITS technologies has focused primarily on passenger vehicles and has not been vigorously developed or applied to motorcycles. Nevertheless, existing and emerging ITS research results have the potential to be adapted to motorcycles. The two research areas below have the potential to significantly contribute to such applications.

The human-machine interface (HMI) requirements of the motorcycle are hugely different from passenger cars. The driving task requires more instantaneous attention and the possibilities to provide visual or audio information in a safe manner are limited due to the position of the dashboard, the helmet and the background noise experienced by the motorcyclist.

The impact of systems that intervene in the riding task is quite different from passenger cars and requires specific R&D. Stability is critical on a motorcycle and imposes very different constraints compared to 4-wheeled vehicles. The process of deployment of Advanced or Automatic Driver Assistance Systems (ADAS) is extremely complicated notably due to the leaning behaviour of motorcycle.



6. RESEARCH

Additional research is needed to better understand current challenges related to PTW mobility and safety.

Operational research and development is needed to achieve a traffic system which better integrates and protects PTWs in a cost efficient manner. A co-ordinated and concerted cooperation between a variety of disciplines (e.g. civil and mechanical engineers, economists, educationalists, psychologists, transport planners, lawyers etc.) is key to the development of a consistent set of measures to address real issues regarding the safety of PTW riders.

ITS requires more R&D on its capacity to prevent PTW crashes. Further investigation is required dealing with the content and effectiveness of training, including post-licence training, with the aim of improving the behaviour and safety of both drivers and riders.

7. SAFE SYSTEM

The safe system approach recognises the fact that road users can make mistakes, or take inappropriate decisions; the role of the system is first to minimize the production of these errors and secondly to prevent road users from death and serious injuries when errors occur.

Inclusion of PTW riders into the Safe System yields two challenges. The first is the technical problem of providing protection from physical harm at the speeds at which collisions with other vehicles or fixed objects are likely. The second challenge is to ensure that any measures taken to improve PTW safety are supported both by the broader community and by PTW riders in particular.

This leads to consideration of whether the conventional Safe System approach should be modified by recognising that, in the short to medium term, use of PTWs will remain an inherently risky activity and that measures should be taken to reduce risk. This may result in, for example, strategies that focus more on avoiding crashes, rather than mitigating their effects, as outlined above in the Swedish strategy.

The risk mitigation approach then poses another challenge for jurisdictions. While the Safe System approach, for example as exemplified by Vision Zero, reinforces the unacceptability of trauma, a risk reduction approach to some extent confirms that some level of risk is acceptable.

While much of the responsibility for implementing a PTW safety strategy will rest with governments and industry, no significant change will be possible without engagement with the community to ensure that they are aware of the shared responsibility for road safety. This extends beyond responsibility on the road to responsibility at other times.

Facilitating a safety dialogue among the motorcycling community has proven to be an effective tool in conveying safety messages.

Conclusion

FEMA and FIM Europe agree with the seven statements made in the draft report and cited here. We consider that they should be used as a template on which to assess any policy related to these issues. They also provide a basis on which to assess all other policies related to motorcycle safety and the use of powered two wheelers in general.

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