

Session Descriptions

Motorcycling in the Regions

Increasing numbers of Powered Two Wheelers are being used across the world. The demand is driven by the increasing middle-class population across the globe, looking for affordable and efficient means of transport, such as motorcycles and scooters and mopeds. They are used for commuting, business/delivery and for leisure. Especially in urban areas, including in many European cities, the powered two wheelers are a crucial mode of commuting. According to the Global Status Reports on Road Safety by the WHO, the proportion of PTW user fatalities increased from 23% in 2013 to 28% in 2016. Higher proportions (up to 80%) can be observed in countries in Asia and Latin America where motorcycles can make up the majority of the vehicle fleet. Due to the lack of passive safety protection on the vehicle, motorcyclists are particularly vulnerable in traffic accidents.

This session will highlight different challenges around the world in order to increase understanding of the different realities met by each of the regions and continents represented. Issues in the overviews will include:

- *Regional facts and figures (countries, economic indicators, population, ...)*
- *Motorcycle use (predominant use and type of motorcycles, PTW fleet size and trend)*
- *Motorcycle safety situation (accident/fatality trend and patterns , insights from research)*
- *Areas of attention, among others:*
 - *Motorcycle mobility policy in the region*
 - *Training and licensing, and other user aspects*
 - *Road infrastructure*
 - *Technology, vehicle aspects and local/regional vehicle requirements*

I - Sustainable Practices, Work Related Issues and Procurement

Recommendation #1: Sustainable Practices and Reporting¹

Recommendation #2: Procurement

Recommendation #4: Child and Youth Health

- *How could **corporations** engage their sustainability practices to include PTW safety and report on this? E.g., Corporations which operate or associate a professional PTW fleet or involve travel to/from work for employees especially in LMIC? What targets could they have for their value chains and for their products.*
- *What are best practices for **fleet operators and their customers** (moto-taxi, police force, ...) addressing purchase/procurement, fleet operation fleet maintenance, continuous training of riders?*
- *How can we transport **children and youth** on moto-taxi?*
- *What can be the role of **PTW rider clubs, industry associations and insurance companies** in promoting value of safe motorcycling and how can we engage them?*

This session will look at how businesses can help with improving road safety. It will focus on all work-related movements by motorcycle including commuting, fleet operators and those who employ owner-riders including those who act as brokers (e.g. the “gig” economy). A large amount of vehicle traffic globally is covered by this sector of the economy and therefore large changes can be driven by companies using a Safe Systems approach. This should include internal procedures dealing with employees, but also procurement of services provided by motorcyclists and their employers.

¹ The recommendations refer to the report of the Stockholm Conference Academic Expert Group https://www.roadsafetysweden.com/contentassets/c65bb9192abb44d5b26b633e70e0be2c/200113_final-report-single.pdf

II - Modal Shift and Urban Needs

Recommendation #3: Modal Shift

Recommendation #4: Child and Youth Health

- *How would the cities like mobility to see organised? What role can **PTWs and micromobility** play within that vision?*
- *What are **cities' requirements** to accept PTWs as a **sustainable mode of transport**? (What would a PTW have to fulfil to become a "**cleaner, safer and affordable mode**" of transport? What **other requirements** would have to be fulfilled, such as noise, CO2 emissions, energy consumption etc?)*
- *What is the role of PTWs in a multimodal trip, how to **connect PTW to public transport**?*
- *What are the **needs from the commuters, including adults, children and young people** (fast, safe, secure, convenient, flexible, affordable, available, secured parking and gear storage) balancing between 4-W's, public transport, 3W (Tuk-tuk), PTW, moto-taxi or e-scooter?*
- ***What solutions should be piloted** and evaluated as they have great potential?*

With more focus on active travel, what role do powered-two-wheelers have in the cities of the future? PTWs will have to become cleaner, safer and more affordable and this session will look at the steps needed to be taken for this to happen. Consideration will also be made about interchanges with public transport and the general needs of commuter traffic.

III - Training, Education and Licensing

Recommendation #2: Procurement

Recommendation #4: Child and Youth Health

Recommendation #7: Zero Speeding

Recommendation #8: 30 km/h

- **Lack of requirement** (speed, alcohol, licensing...) or **no enforcement** of requirement
- **Minimum Training Requirements** (machine control, attitude, traffic rules) for license-related training; advanced training schemes.
- **Education: Cultural values/Awareness campaigns** (speed, alcohol, helmet wearing...) LMI/HI
- **Licensing:** Lack of licensing or no mandatory requirement in some LMI;
- **Graduated/progressive access** to motorcycles

This session will look at how training, education and licensing can make motorcycling safer for all. Basic training can drive major increases in road safety by reducing the 'novice' period that all riders face. In many countries, rules on speeding, alcohol-use and other risk indicators are beyond the resources of existing enforcement infrastructure. Training and education can be a route to increasing compliance. This session will also discuss minimum training requirements and which elements would be the most appropriate areas on which to focus.

IV - Vehicle Safety, Protective Safety and Intelligent Transport Systems

Recommendation #2: Procurement

Recommendation #4: Child and Youth Health

Recommendation #6: Safe Vehicles Across the Globe

Recommendation #9: Technology

- **Minimum Vehicle safety standards** - HI vs LMI (regulation/voluntary commitments), including import of used vehicles/parts Low quality vehicles
- **Type of vehicles to transport children and young people** – how can a PTW be adapted to transport children and youth, from what age will it be feasible?
- **Advanced technologies on cars** incl. ADAS systems for cars/trucks/buses to prevent PTW collisions (vehicle standards....)
- **Advanced technologies on MC** C-ITS, eCall, nomadic devices / retrofitting, alcolocks
- **Technical inspection**
- **Personal Protective Equipment** (Helmets- Garments standard - Airbag- on vehicle/on rider)
- **NCAP for PTWs** - what would the rating consider/how would it rate (metric- different depending on vehicle category?). Focus more on active/passive safety (safety cage - "C1")? What would be challenging safety performance?

Technology on cars and other 4-wheeled vehicles has driven remarkable improvements primarily for the safety of vehicle occupants. Recently, some of these improvements have also benefited other road users. However, motorcycles are a different platform, and this session will look at how these technologies may benefit motorcyclists, and which can be transferred. Many of the technologies are more appropriate for the rider than the vehicle, and the session will also look at Personal Protective Equipment to ensure all parts of the system are safe.

V - Road Infrastructure and Road Environment: Towards A Safe System Integrating Powered-Two-Wheeler Mobility

Recommendation #4: Child and Youth Health

Recommendation #5: Infrastructure

Recommendation #9: Technology

- *What are “safe **system principles**” for PTW?*
- *What could be **low-cost treatment** for existing infrastructure?*
- *How of adequately include PTWs in road infrastructure research, design, development and deployment?*
- *Which infrastructure **solutions are effective and where**?*
- *What is the need, status, roadmap of PTW **road infrastructure rating systems**?*
- *What are the **conditions required** (e.g. traffic volume) for dedicated PTW lanes to be effective?*
- ***Trade-offs** between infrastructure safety initiatives between benefits for road users (e.g. wire-rope barriers) e.g. what would a pedestrian crossing look like to accommodate the conflict between PTWs and pedestrians/bicyclists?*
- *How to promote a **safe and efficient interaction** between PTWs and other road users (bus lane, intersection solutions, filtering, ...)*
- *Road **maintenance** affecting MC safety?*

At the heart of this workshop is the Safe Systems approach to road safety. As part of this, the ‘road’ in ‘road safety’ (the infrastructure) also needs due consideration. This session will look at how infrastructure can be initially designed to be safer for motorcyclists, be later made to be safer for motorcyclists and be maintained to be safer for motorcyclists. There are clear trade-offs to be made between the safety of motorcyclists and the safety of other road users and this session will also look at where that balance lies.

VI - Speed Management and Adapting Speeds and Behaviour to Different Environments

Recommendation #4: Child and Youth Health

Recommendation #7: Zero Speeding

Recommendation #8: 30 km/h

Recommendation #9: Technology

- *What would this mean for PTW?*
- **30 kph zones** (mixed environment vehicles/different road users).
- **Should products be limited:** *Regulating access and geofencing for PTWs & PTW sharing schemes supporting speed compliance (commercial fleet focus)?*
- *Zero tolerance.*
- **Technical solutions** *supporting speed compliance (infrastructure; enforcement; vehicle technology)*
- **Incentives** *by Insurance companies and positive messages from motorcycle clubs (awareness raising, cultural change)*
- **Enforcement and behaviour:** *Aggressive riding (tailgating, wheeling,)*

Travelling at excessive speed has been shown to be a factor in the majority of accidents. Even if it is not a direct cause, the increase in energy is often a factor in the severity of injuries. This session will look at appropriate measures to reduce speeds. Often co-existing with excess speed is aggressive driving and other inappropriate behaviours. This session will also look at measures to moderate the behaviour of road users.