

A Shared Road to Safety - A Global Approach for Safer Motorcycling

Leipzig, May 21, 2014

Key conclusions from the ITF Research Working Group on the safety of powered two-wheelers

Pierre van Elslande (Ifsttar, France)

Chairman of the International Transport Forum
Motorcycle Working Group

ITF Working group on motorcycling safety

- 28 experts representing 18 OECD/ITF countries
 - A wide range of background and skills
 - From research to decision making

- Objectives:

- Review the latest research works in the field of motorcycling safety
- Better understand road crashes mechanisms and configurations
- Evaluate most effective measures in the framework of a “safe system” approach
- Make recommendations to decision makers in OECD/ITF countries



The role of PTWs in mobility

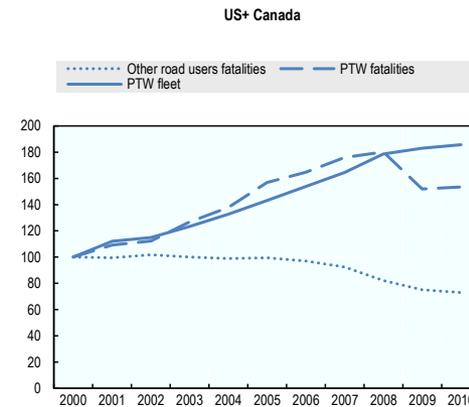
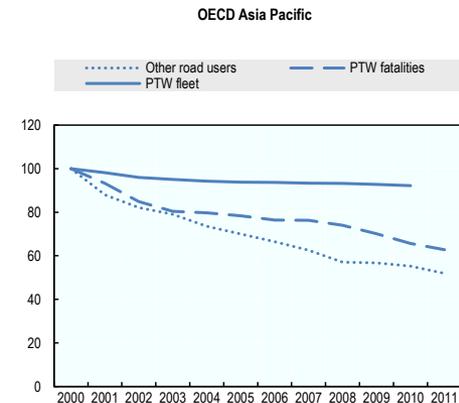
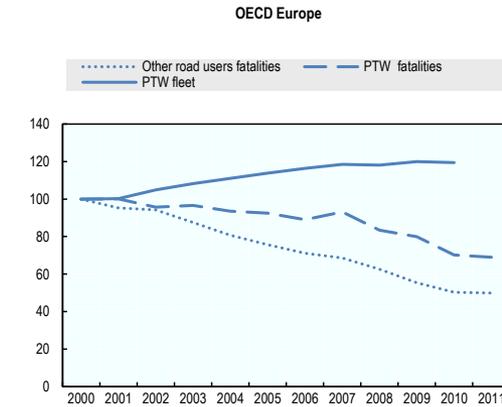
- The powered two-wheeler population increases and plays a significant role in mobility
 - An important component of the traffic system
- It is essential to take into consideration PTWs needs in transport policy
 - Benefits in mobility and safety





Safety issues for PTWs

- Riders are far more at risk than car drivers
 - Fatalities and severe injuries
 - Per km driven the risk is, depending on the country, between 9 and 30 times higher
- Due to physical vulnerability of the riders and specific crash patterns
 - Poor perception and control
- A safe system approach is required
 - Prevent and protect roads users from their errors
- A toolbox of measures is needed
 - Specific and various needs of PTWs



Promoting appropriate behaviour of all road users

- Licensing, training and education are essential tools for improving riding safety
- Every novice riders should be trained
- Access to PTWs should be gradual, while riders are gaining experience and maturity
- Training should not only focus on basic manoeuvring skills and mastering traffic situations, but also address attitudes towards safety
- Other road users should also be made aware of the specific risks associated with PTWs: vulnerability and crash patterns

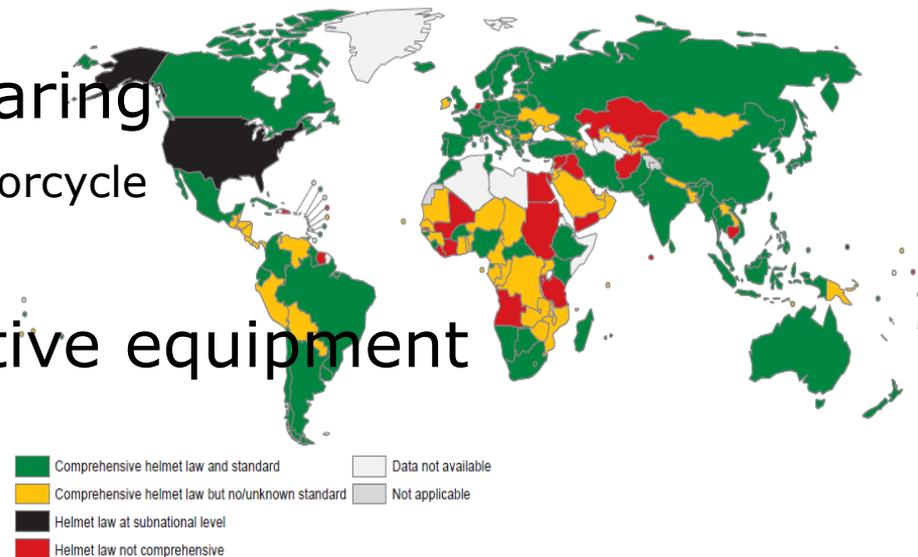


The helmet: just a necessity

- The main "body" element of PTW riders
- Lack of legislation in some countries
- Specific problems in LMIC
 - Price problem
 - Standards not always appropriate (hot countries)
 - "False" helmet

Figure 14
Motorcycle helmet laws and helmet standards, by country/area

- The objective: a 100% wearing
 - Driver + passenger / Moped + motorcycle
 - Legislation and enforcement
- Promote the use of protective equipment



Vehicles with enhanced safety features

- Reliability of the emergency braking
 - Anti-lock braking system (ABS) and Combined Braking System (front/rear wheels)
- Promote detectability
 - Lightening
 - Electronic detection systems
 - Collision warning, blind spot detection, etc.



The road environment

- Infrastructure essentially thought for cars
 - Wide variety of users
 - Large speed differential (intersections)
 - Poorly maintained infrastructure (potholes, debris ..)
 - To which PTW are very sensitive
- Infrastructure should be improved to better integrate PTW
 - With the development of self-explaining roads
 - Traffic calming measures
 - PTW friendly equipment (“forgiving” roads)
 - In some cases dedicated lanes (e.g. Malaysia)



Integrate PTW in a safe system approach

- *'Errare humanum est'*
 - Face to traffic system complexity, human beings can make mistakes and take inappropriate decisions
 - The role of a safe system is to prevent the production of errors and to protect the users when they occur
- Challenges linked to riders vulnerability
 - Technological progresses / Traffic calming measures
 - *'An ounce of prevention is worth a pound of cure'*
- A shared responsibility
 - All relevant stakeholders need to be actively involved in the process of drawing up and implementing a shared road safety strategy



Thank you for your attention

