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

• 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