

Informal document No. GRSP-48-22  
(48th GRSP, 7 - 10 December 2010,  
agenda item 12)

# Proposal to establish an informal working group to develop a standard for lightweight protective helmets for motorcycle riders

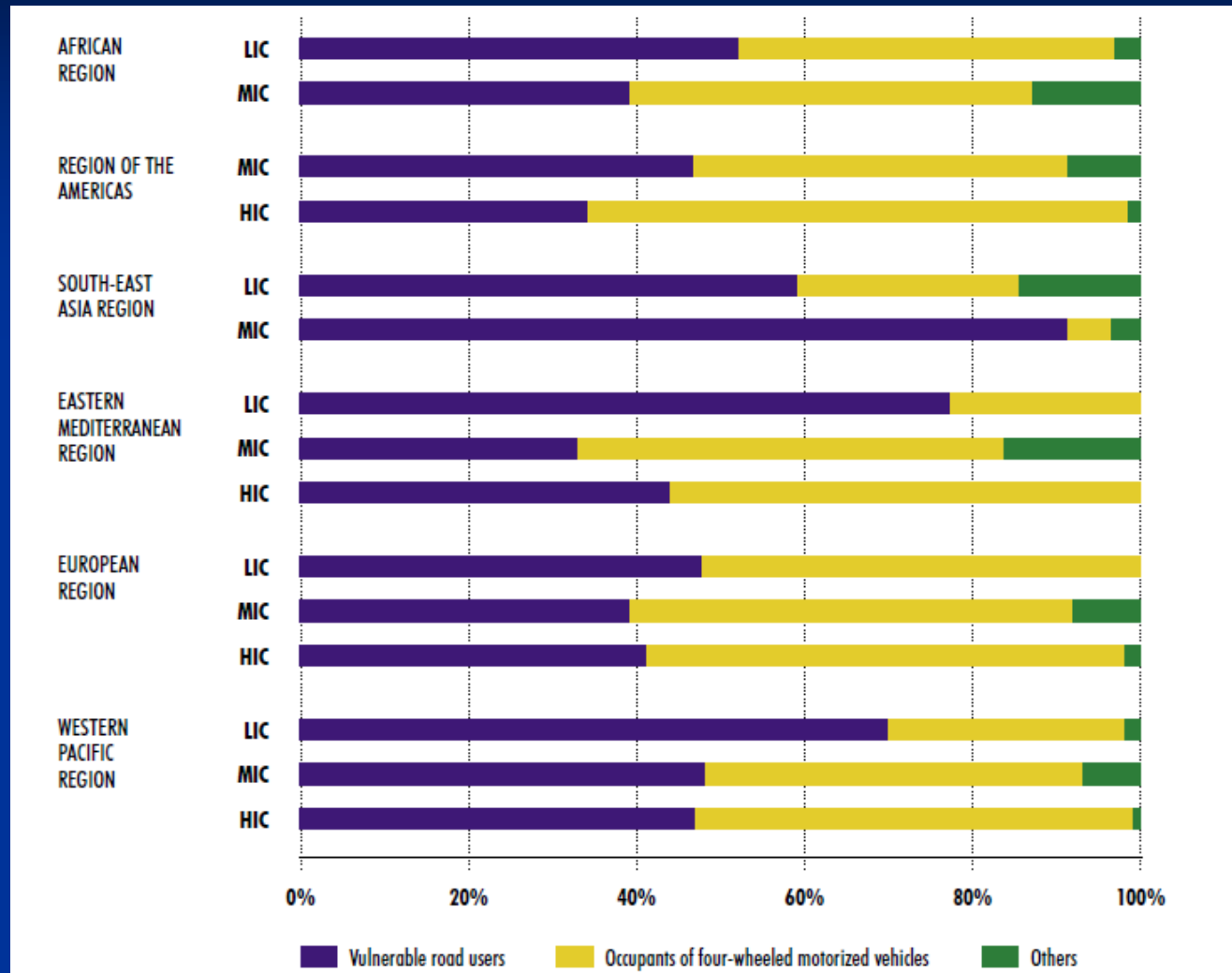
Terry Smith, Ph.D.

# Objectives of the FIA Foundation

**≡ MAKE ROADS SAFE**  
The Campaign for Global Road Safety



# Background



# Motorcycle Helmet Standards

## WHO Global Status Report on Road Safety (2009)

- 90% of countries surveyed have helmet laws
- 74% of these countries have a comprehensive motorcycle helmet law (both drivers and passengers must wear helmets)
- Only 43% of countries surveyed had a motorcycle helmet standard
- Only 40% of countries surveyed had a comprehensive motorcycle helmet law and a motorcycle helmet standard

Many lives are currently at risk. Lack of appropriate laws and standards make enforcement and public awareness of minimal value.

A lightweight motorcycle helmet standard will save many lives.

# Motorcycle Helmet Effectiveness

## Effect of not wearing a motorcycle helmet

- Increases the risk of sustaining a head injury
- Increases the severity of head injuries
- Increases the time spent in hospital
- Increases the likelihood of death from a head injury

## Effect of wearing a helmet

- Decreases the risk and severity of injuries by about 72%
- Decreases the risk of death by up to 39%
- Decreases the cost of health care associated with crashes

# The Simple Solution: UN/ECE R.22

- Part of the 1958 Agreement
- Specifically pertains to motorcycle helmets
- Already well developed and fully harmonized with other vehicle regulations
- Has been shown to be effective at reducing motorcycle head injury rates (Cost 327 Report)
- Countries can choose to accept earlier revisions of the standard if necessary

.... But is this the solution???

# The Reality for Developing Countries

- ECE R.22 helmets are expensive, large and hot and as a result, motorcycle helmet usage rates are well below acceptable levels.
- Developing countries do not have the technical capacity to confirm qualification to ECE R.22. As a result, counterfeit helmet rates are high.
- Developing countries do not have the financial capital to invest in ECE R.22 test equipment (currently approximately \$450K USD)
- **Earlier revisions of the ECE R.22 standard would not permit lightweight helmets to be accepted due to a lack of coverage**

# The Reality for Developing Countries

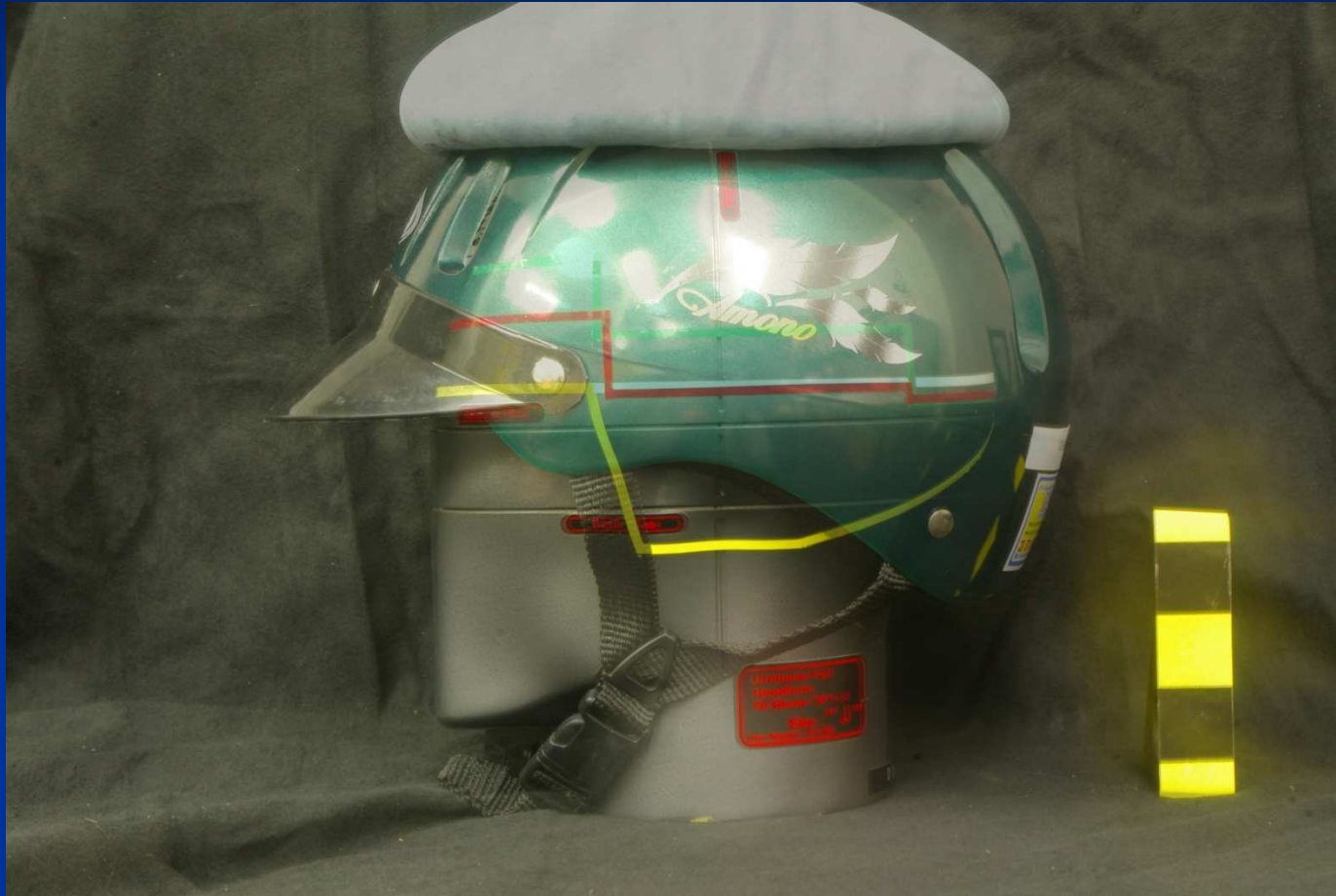


**A helmet on every head  
in the Decade of Action  
for Road Safety**

Typical intersection in Vietnam

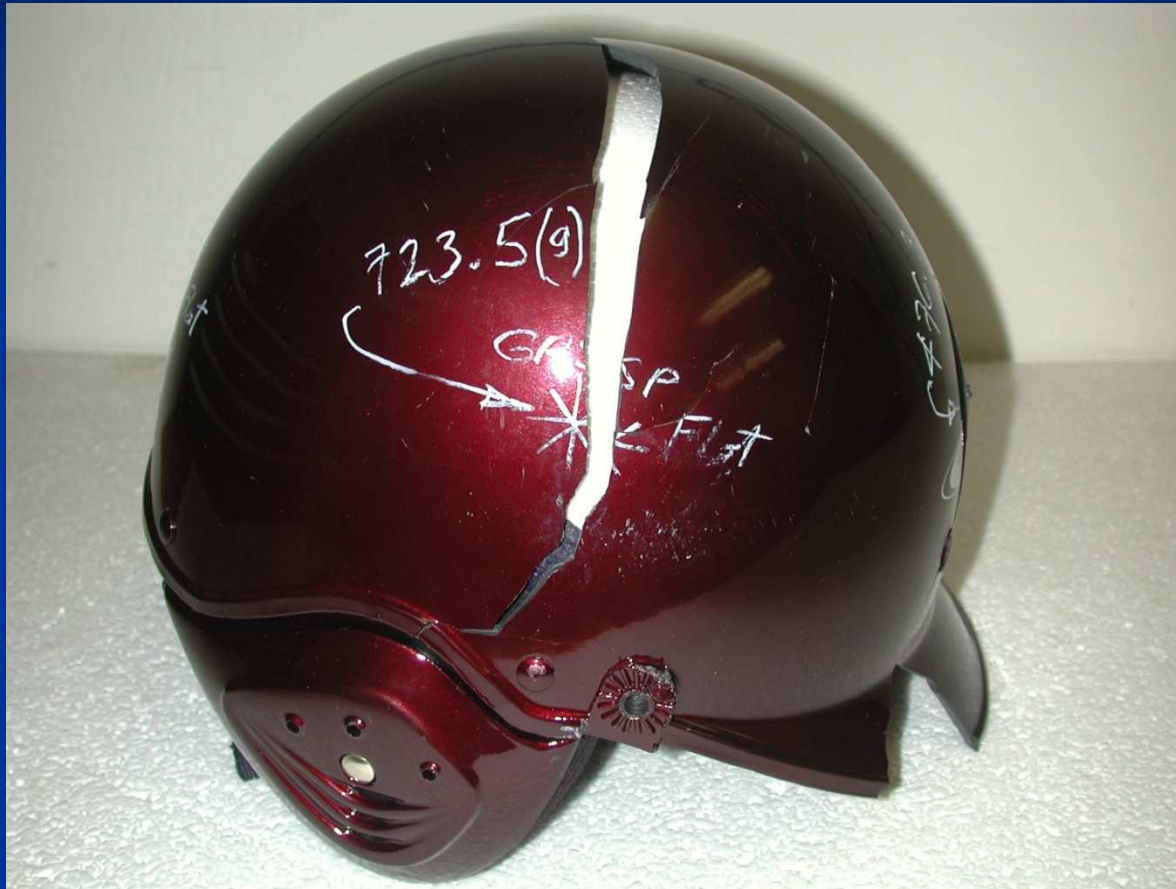


# The Reality for Developing Countries



Yellow line represents UN/ECE R.22  
protective coverage requirements  
(R.22 revisions 01 to 05)

# The Reality for Developing Countries



Unqualified Cambodian Motorcycle Helmet

# Meeting with GRSP Secretariat, FIA Foundation, GHVI and GRSP

## November 2010 (152 WP29)

- Meeting participants recognized common goal of maximizing global motorcycle helmet usage
- Meeting participants recognized the challenges of wearing UN/ECE R.22 helmets in hot and humid weather conditions and the lack of helmet usage issues
- Meeting participants suggested that WP.29 develop a new Resolution with basic provisions for light weight protective helmets
- The above-mentioned organizations were of the opinion that the introduction of helmets with these requirements could be a first step for a later introduction in these countries of protective helmets in conformity with the current provisions of UN/ECE R.22

# Proposal

To form an informal working group to develop a standard for lightweight protective helmets for motorcycle users

- This standard is NOT intended to replace or revise UN/ECE R.22
- This standard must be developed within framework of GRSP harmonization objectives
- This standard could represent a first step towards future harmonization with UN/ECE R.22

Thank you.