



Regional Workshop on Motorcycle Helmets Kuala Lumpur, Malaysia 7 April 2017

Summary Report

Background

Every year, nearly 1.3 million people are killed and up to 50 million people are injured on the world's roads. Half of all road traffic deaths are among vulnerable road users such as pedestrians, cyclists and motorcyclists. Road traffic injuries are also the leading cause of death for young people aged 15-29 and the eighth leading cause of death globally. Beyond human suffering, road traffic deaths and injuries impose significant economic and financial losses to societies, disproportionately affecting low and middle income countries where 90 percent of fatalities occur. More than half of global road traffic fatalities occur in the Asia Pacific region with approximately 30 percent of the deaths in Asia involving powered two-wheelers.

In 2010, the United Nations General Assembly proclaimed a Decade of Action for Road Safety ("Decade"). The goal of the Decade (2011-2020) is to stabilize and then reduce the forecast level of road traffic deaths around the world. The Decade reached its mid-term review last year (2015) with relatively little observed change in the number of global annual road traffic deaths. Furthermore, the Sustainable Development Goals include a mandate to decrease road traffic deaths by 50 percent by 2020 (SDG 3.6). This was followed by the UN General Assembly adopted resolution (A/RES/70/260) on Improving Global Road Safety on 15 April 2016, which further encourages member states to take stronger measures to achieve Sustainable Development Goals (SDGs) targets 3.6 and 11.2.

Given that only four years remain until the end of the Decade of Action for road safety and to achieve SDG 3.6, it is imperative that the global community take concerted action to improve road safety. United Nations legal instruments developed under the auspices of the UN regional commissions have assisted many countries in developing and enforcing traffic rules and measures; producing safer road vehicles; reducing the risk of collisions with dangerous goods and hazardous materials; and ensuring that only safe and well-maintained vehicles and competent drivers are allowed to participate in traffic.

Motorcyclists are more than 26 times more likely to die in a crash than car passenger. However, in low and lower middle income countries, motorcycles remain the main mean of transport, also for children. The use and quality of helmets for powered two-wheelers, particularly for motorcycles, continue to vary across the region and have a paramount role to the safety on the roads. The lack of harmonized standards, especially in Asia Pacific region, hampers enforcement of safe helmets and clear identification of them by customers and authorities. Evidence based studies show that helmet wearing enormously increases the chance of surviving a crash. Addressing two-wheelers as one of the major cause of road casualties worldwide, the Working Party on Passive Safety (UNECE/GRSP), a subsidiary body of WP.29, has been developing and updating provisions since 1972, of Regulation No. 22 dealing with performance requirements of motorcycle helmets.

It is within this context that the United Nations Secretary-General's Special Envoy for Road Safety - who was appointed to advocate for stronger political will and resources - joined with the United Nations Economic and Social Commission of the Asia Pacific (ESCAP) and the United Nations Economic Commission for Europe (UNECE) along with the Malaysian Institute of Road Safety Research, to organize a regional Motorcycle Helmet Safety Workshop.

Regional Workshop Concept Note

Regional Workshop on Motorcycle Safety was held in Kuala Lumpur, Malaysia on 7 April 2017. The workshop was participated by 55 government officials and civil society representatives from 13 countries in the South and South-East Asia region, where 34 per cent of the deaths involve powered two-wheelers.



Hosted by the Malaysian Institute of Road Safety Research (MIROS) and co-organized by the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) and United Nations Economic Commission for Europe (UNECE), this regional initiative has covered motorcycle crashes as one of the major causes of road casualties as well as the ways to prevent it through the mandatory use of a proper helmet and proper enforcement. It was a great opportunity to enhance regional dialogue on existing practices in the region as well as on the necessary rules to manage safe helmet usage, particularly with the implementation of UN Regulation No. 22 and related United Nations road safety conventions.

Summary of Workshop

The Workshop was organized into four segments:

- I. Opening Session
- II. Session One: UN Regulation 22
- III. Session Two: Regional progress in improving road safety including issues regarding helmet use in the region
- IV. Session Three: Facilitated thematic discussions in groups

Below are conclusions and highlights from each session. Individual PowerPoint presentations from national experts have been attached separately.

I. Opening Session

- The Opening Session began with remarks from **Mr. Jean Todt**, the United Nations Secretary-General's Special Envoy for Road Safety, who highlighted the global scale of road traffic fatalities and the necessary measures that need to be taken in the region. The use of powered two wheelers is growing due to urbanization, the higher need for mobility, accessibility, affordability and flexibility, especially in South-East Asia. Of the 316,000 annual road deaths in South-East Asia, an estimated 34 percent are related to powered-two wheelers and majority of these deaths are a result of head injuries. Enforced policies that promote the use of quality and proper helmets along with adequate training, licensing and insurance, can significantly reduce the number of deaths and serious injuries due to powered-two wheelers. The Workshop is an opportunity to come together and address the discrepancies in the quality of helmets in the region as well as to share best practices that address the differences including the implementation of UN regulation on helmets (regulation 22) and adequate enforcement.
- Mr. Todt was followed by **Mr. Edoardo Gianotti** of the UN Economic Commission for Europe, who emphasized the role of the UN legal instruments including the Regulation 22 in addressing the high number of fatalities in the region. The legal instruments do not replace a national law but instead, supports it, helping to ensure that every citizen around the world is equally protected.
- **Mr. Madan Bandhu Regmi** of the UN Economic and Social Commission for Asia and the Pacific provided an overview of the regional landscape of road traffic fatalities and transport trends. Recognizing the growth of urbanization, the movement between urban and rural areas, and the increased demand for transport, we must in the short-term address issues such as high fatalities on motorcycles but also invest in long-term structural issues. This would include access to public transportation, which would help to curb the growing number of private vehicles, including powered two-wheelers.
- **Dr. Professor Wong Shaw Voon** of Malaysian Institute of Road Safety Research (MIROS), the local host, summarized the reality in the country and ASEAN region and reiterated the



commitment of the Malaysian government in addressing road safety, also beyond country borders.

II. Session One: UN Regulation 22

This session addressed the issue of safer helmets in South and South-East Asia. After an initial presentation on the role of the UN road safety conventions by **Mr. Gianotti** of UNECE and other instruments in the regional context – Benefits to accession of UN legal instruments and Minimum Level of Safety for Helmets (UN Regulation No. 22), the session offered case studies experiences of **Malaysia** and **France**, which are Contracting Parties to the 1958 UN Agreement and signatory of UN Regulation No. 22. This was then followed by a presentation from Mr. Regmi covering the road safety situation in the region and ESCAP's mandates. National presentations were given from **Viet Nam**, **Indonesia**, **Myanmar** and **Thailand**, which shared experiences with motorcycle helmet policies.

Conclusions from Presentation on “UN Regulation No. 22,” moderated **Mr. Gianotti** of UNECE:

- The minimum safety level provided by UN legal instruments for vehicle and accessories enjoyed by developed countries in the past and in the present, should be shared with the whole global community.
- Everyone has the right to have the same minimum level of road safety. It's a matter of human right.
- Harmonization of legal requirements for the design and use of vehicles or accessories such as helmets is a way to achieve this goal. There are no second class citizens that deserve lower level of protection and UN Regulation No. 22 is the mainstream of minimum level of helmet safety that PTW riders shall deserve globally.
- The transposition of UN Regulation No. 22 into national legislations should coincide with the accession to the 1958 Agreement. In such a way countries can profit of: (i) know-how of other Contracting Parties, (ii) technical services of other Contracting Parties can perform tests on helmets on behalf of others (iii) have a better market surveillance, since the revision 3 of the Agreement will allow access to type approval data (DETA system) to Contracting Party (fake helmets would be more easily identified), (v) better enforcement, since police can easily identify good helmets through E markings.
- It is not easy to identify the contribution of UN Regulation No. 22 in reducing road fatalities, without considering enforcement and education.
- However, countries that became contracting parties to UNECE agreements and conventions, including the 1958 Agreement and its annexed Regulation No. 22, have halved their casualties since they acceded.

France

- The experience of France was a showcase how a Contracting Party to the 1958 Agreement can enforce successfully UN Regulation No. 22.
- France acts since the seventies to reduce PTW casualties. The mandatory use of helmets and law enforcement, lead to greater reduction on fatalities (mainly mopeds than motorcycles).
- According to the experience of France, the development of UN Regulation No. 22 and training of PTW riders have a limited contribution to road casualties without strong enforcement of helmet wearing.



Malaysia

- Malaysia is a Contracting Party to the 1958 Agreement and UN Regulation No. 22 it has been used in parallel with national standard (MS1) since 2006.
- MS1 has been aligned to UN Regulation No. 22 during years. Moreover, it has been developed further by including more severe test such as penetration test, to represent real road conditions in Malaysia (e.g. presence of rocks and sharp edges, especially in rural areas).
- Maintenance of helmets is a key element of helmet usage: helmets are easily worn by tropical weather conditions and their replacement was suggested after five years of usage or after a severe shock (even though the outer shell remained apparently intact).
- The importance of awareness campaigns was highlighted. It was suggested to create videos or simple articles to educate the society on how to choose the correct helmet to wear and how testing is applied on the real situation. Such videos or articles could be used and shared with all Contracting Parties to the UN 1958 Agreement.

Conclusions from Presentation on “Recommendation and steps for further actions – on use of helmets fitting region’s needs (e.g.: helmet wearing and affordability) including the sharing of the best practice from countries,” moderated by **Mr. Regmi**.

- Mr. Regmi made a presentation covering road safety situation in the Asia-Pacific region including the status of motorcycle safety in the region. He also introduced ESCAP refined regional road safety goals and targets adopted by the Ministerial Conference on Transport held in Moscow in December 2016.
- Representatives of **Indonesia, Myanmar, Thailand** and **Viet Nam** outlined challenges and road safety situation in their countries and shared national experiences and initiatives taken to improve road safety. The main points stressed by the countries were:
 - The common challenges faced by the countries were increasing fleet of powered two-wheelers, problem of mixed traffic, lack of rules and regulations on use of helmets and standard, lack of effective enforcement of existing rules and regulation, increasing rate of accidents, fatalities and injuries from crashes;
 - Countries were implementing national policies, strategies and action plan to improve road safety however the progress was not encouraging as anticipated, therefore focused and targeted action plan were needed to improve road safety situations;
 - Countries have stressed that it is time for action and have established National Road Safety Council/Committee for coordination of road safety policies;
 - More efforts were require on road safety education and advocacy;
 - Cultural barrier in wearing helmet in **Viet Nam** led to customized helmet design and its use;



- **Indonesia** stressed the need to improve quality and extent of public transport and were developing BRT, MRT and LRT projects;
- Need to enact rule/law for mandatory use of helmets and helmets for kids was stressed
- Standard, quality, cost and affordability of helmet was also highlighted;
- Lack of testing facility and accreditation institution also hindered enforcement of helmet standard;
- Need special road safety measures and campaigns during new year and festival season (**Thailand**);

III. Session 2: Regional progress in improving road safety in Asia and the Pacific, the updated Regional Road Safety Goals and Targets for Asia and the Pacific 2016-2020 and National Experiences - Helmet use in the Region

- Representatives of **Bhutan, Cambodia, Lao PDR, Mongolia, Nepal, and Pakistan** outlined challenges and road safety situation in their countries, and shared national experiences and initiatives taken to improve road safety. The main points stressed by the countries were:
 - Some of the issues highlighter were: growth of motorcycle, problem of mixed traffic, quality of helmet, cost of helmet and affordability, weather-affects safety and helmet use- slippery in winter (**Mongolia**), hot and humid weather (South and South west Asia), concerns of female pillion riders (side sitting, hair), child helmet and foot rest;
 - Speeding, non-use of helmets and drink driving were main cause of accidents and casualties;
 - Lack of enforcement of helmet laws was common issue raised;
 - Countries were implementing road safety strategies and action plan but the progress is limited- need to focus attention on reducing number of accidents, fatalities and serious injuries in order to meet the SDG target on road safety;
 - Need multidisciplinary approach to improve road safety;
 - Data needs for analysis and to make informed decision;
 - Need to improve quality and extent of public transport;
 - Stressed importance of securing helmet strap properly;
 - Low level of helmet use in rural areas almost half compared to urban areas;
 - Observance of helmet use day in **Lao PDR** has increased helmet use;
 - **Bhutan** outlined good enforcement and compliance of helmet use;
 - **Nepal** shared successful implementation of do not drink and drive campaign in Kathmandu;



- Side sitting of pillion female riders in **Pakistan** - cultural issue but more risky;
- Need testing and accreditation facilities for helmet standard;
- Issue related to driving license- less number of driving license issued compared to total number of motorcycle and young rider driving without having driving license.
- The participants of the workshop requested the Special Envoy to plan more road safety activities in the Asia Pacific region.
- The representatives from **Bhutan, Cambodia** and **Nepal** requested support to plan and organize national workshop on motorcycle safety in their country as they were planning to develop rules/regulations on motorcycle safety and helmet standard.

IV. Session IV: Facilitated Thematic Discussions in Groups

Based on the presentations above and under the guidance of the experts in the field, the participants addressed - in **thematic discussions** - four particular areas of actions to improve Vehicle Safety, including:

1. Steps to accession of UN legal instruments (including UN regulation No. 22)
Moderator: Mr. Edoardo Gianotti, UNECE
2. Regional challenges and solutions
Moderator: Mr. Madan Bandhu Regmi, UNESCAP
3. Helmet testing/Conformity of Production/Market Surveillance (prevention of “fake” helmets)
Moderator: Mr. Pierre Castaing, UTAC France
4. Safety helmets for children (and other means to protect them on two-wheelers)
Moderator: Dr. Wong Shaw Voon

1. Steps to accession of UN legal instruments (including UN regulation No. 22) **Moderator: Mr. Edoardo Gianotti, UNECE**

- Accession to the 1958 Agreement and enforcement of Regulation No.22 is easier than leaving the status quo, because it provides tools for conformity of production and enforcement (E marking easily checked by local police).
- Moreover, it could encourage local production of helmets improving affordability and supporting trade, according to the main basic principle of the Agreement: "type approved once delivered everywhere".
- Country Permanent Missions in New York can provide best information on accession to the Agreement (e.g. which appointed minister should sign the accession).
- The accession to the Agreement can provide better tools for market surveillance (see DETA), since governments are still looking cheapest helmets to be imported but without any means to prevent fake/toy helmets.
- Participants expressed the need to establish regional coordination meetings on the issue of helmets.

2. Regional challenges and solutions **Moderator: Mr. Madan Bandhu Regmi, UNESCAP**

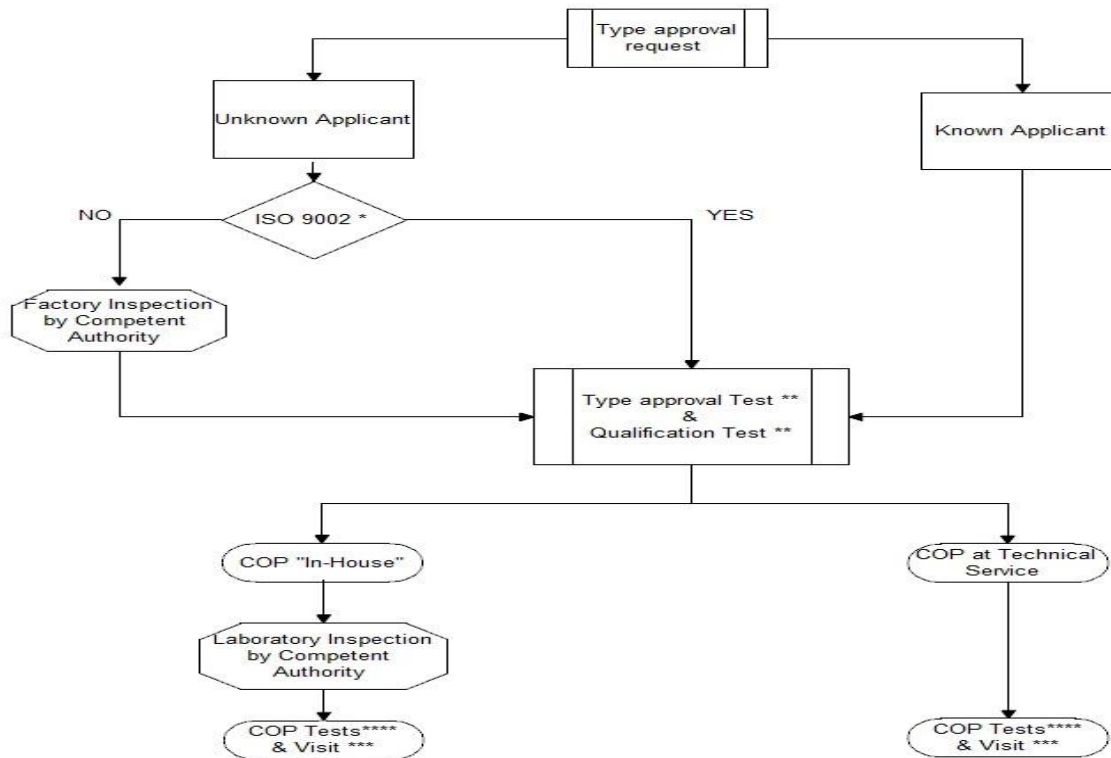


The group discussed regional challenges and possible solutions to improve road safety situation specific to motorcycle safety. The main points discussed and conclusions presented to the plenary were:

- Countries should make/enact laws/regulations for mandatory use of standard helmets for driver and pillion riders;
- Countries need to adopt appropriate standard for helmets;
- Improve enforcement of traffic laws and use of standard helmet;
- Countries need to develop short term, medium term and long term plan to improve road safety;
- Countries' need to improve, develop and invest in appropriate infrastructure including motorcycle lanes, segregation lanes;
- Improve quality of public transport- so as to reduce dependency on motorcycle;
- Make provision to provide free helmets while selling powered two-wheelers;
- Improve road safety education and advocacy – include road safety in primary school's curriculum, plan road safety campaigns through use of volunteers to support law enforcement officers;
- Advocacy of safety culture - safety culture should start from home- develop cadre of responsible strong mothers to advocate/educate family members and children and community on safety hazards and risks from not wearing helmet and child helmet, standard for helmet and poor driving behaviors;
- Improve process of issuing driving licenses and specify minimum age for issuing driving license;
- Consider innovative ways to improve general public and driver's perception of hazard and risks on roads.

3. Helmet testing/Conformity of Production/Market Surveillance (prevention of “fake” helmets) Moderator: Mr. Pierre Castaing, UTAC France

- Concerning helmet testing and conformity of production, the complete type approval scheme is well described in regulation ECE R22-05 as resumed in the following scheme:



- Mr. Castaing highlighted that the ECE R22-05 is the regulation including the most detailed procedure for CoP compared to other safety regulations for road safety equipment of motorised vehicles.
- The main discussion of the group focused on the fact that many markets include "fake" motor cyclist helmets sold as "toys" in motorcycle shops. These helmets do not conform to the different national regulations for motorcyclist helmets but are used by motorcyclists, due to their low price, even if not proven to be protective.
- Mr. Castaing informs the group that the price should not relate with the conformity to ECE R22-05. In Europe, an ECE R22-05 helmets (manufactured in ASEAN countries) is sold for a price of less than 25\$ including taxes.
- The French experience shows that it is not sufficient only to enforce the mandatory wearing of type approved motorcyclist helmet for driver and passenger of PTW, but also to clarify in the national legislation that the sales and the imports of motorcyclist helmets is only authorised if they are type approved for motorcyclist use.
- The group concludes that the main actions to be done are the following:
 - Put the responsibility on the dealer and the importer first as a criminal offence.
 - In second step increase the enforcement on the consumer level, in France you lose 3 points out of 12 on your licence if you do not wear a helmet, if it is not buckled, or if it is not type approved. The fine is around 140 \$



- Stitched labels (compared to stickers) are a solution to increase complexity for imports of "fake" products
 - Concerning copies, we have not determined a solution
 - Legislation on mandatory wearing of a helmet without a proper helmet regulation could lead to increasing importation of fake products.
- In conclusion we need:
 - A good technical regulation for motorcyclist helmet
 - To authorise the imports, the sales and the use of type approved helmets
 - To enforce this rules at the three levels: importers, dealers and users

4. Safety helmets for children (and other means to protect them on two-wheelers) **Moderator: Dr. Wong Shaw Voon**

In general, the group agreed that safety for children on roads needs more attention in many dimensions, namely;

- Legislation/law – to mandate children to use safety devices when travelling on roads. In many countries, rules addressing this need are either not available or loose, thus creating loopholes/excuses for non-compliance
- Use of restraints system when travelling in cars (e.g. CRS such as seat, booster) – Availability and accessibility or also affordability are issues that need rather immediate consideration by authorities and industries.
- Use of helmet when riding pillion on motorcycles – Riding without helmets especially in rural and remote areas has become a social norm, for years (maybe even decades) in some places, thus making it very challenging to address. Nevertheless, concerted effort among authorities and stakeholders to improve the situation is highly necessary and frankly, it may take few generations to bring it to a desired target.

With respect to safety helmet, the group agreed that these factors need more attention;

- Fake and low quality helmets are readily available to potential consumers though pricewise, they may not be necessarily cheaper to purchase. In numerous situations, these helmets make their way into the market or entry into countries when declared as toys or games helmet.
- Discourage children from riding motorcycles (as rider and as passenger). In Bhutan, school going children in uniforms are not allowed to ride on motorcycles.
- Helmet standards – many studies have indicated there are differences in child and adult head anthropometrics and separate test requirements may be beneficial to children. However, more research and studies are needed to really understand the overall needs (e.g. helmet mass, acceleration and head injury criteria (HIC) specifications.
- Awareness and advocacy programs for the public especially parents and children on the importance of helmet and road safety should be constant.
- Improvement of law/traffic rules to address children in traffic
- Smart and continual enforcement is highly necessary to ensure improvement in wearing rate and sustainable compliance.

Proposed actions

- Conduct gap analysis among countries with respect to helmet laws, helmet standards and motorcycle use



- Establish or enhance available platform for countries to share motorcycling best practices

V. Conclusions

As Co-Organizers of the workshop, Mr. Edoardo Gianotti of UNECE, Mr. Madan Bandhu Regmi of UNESCAP, Mr. Dr. Wong Shaw Voon of MIROS, and Ms. Priti Gautam of the Special Envoy for Road Safety's Secretariat at UNECE, provided final remarks with overall reflections and next steps:

- It is important to understand local needs. Helmet wearing could be considered as a constraint especially in South East Asia, due to weather condition and local customs (e.g. hairdressing in Vietnam), however strong helmet laws are a prerequisite to improve road safety for PTW.
- UN Regulation No. 22 is a reference for its adaptability to technical progress, absence of specific tests (such as penetration test) that could prevent ventilation.
- Countries that start to adopt a national safety standard can use an early version of Regulation No. 22 to fill the gaps of adequate testing laboratories and profit of cheaper helmets that market can provide. However, half-shell helmets should be banned (To do so countries should apply at least the 02 series of amendments to UN Regulation No. 22).
- Moreover, Regulation No. 22 was recognized unique for its provisions related to conformity of production and routine tests to ensure that production output will maintain the set of requirements mandatory to receive a type approval certificate. The affordability of helmet type approved according to UN Regulation No. 22 was not recognized as an issue, since the majority of helmets sold in Europe are made in South East Asia.
- Participants were satisfied by the intense discussion and showed interest to repeat the experience with more time and technical explanations. It was reiterated (as in thematic group "Steps to accession") the need of regional coordination meetings.
- NGOs have a key role in the issue and representatives (e.g. **Philippines** and **India**) pledged cooperation and advocacy to advance road safety.
- Immediate requests have come from the representatives of **Bhutan**, **Cambodia** and **Nepal** for support to plan and organize national workshop on motorcycle safety in their country as they were planning to develop rules/regulations on motorcycle safety and helmet standard.
- Reiteration that addressing helmets is an important solution while coupling with broader transport policies that promote less use of powered two-wheelers, especially for children, including increase in safe, accessible and affordable public transport.
- Malaysia is committed to road safety and offers to share lessons learned and tools to other countries in the region in regards to UN Regulation 22 and beyond.
- There is a need for the Special Envoy to raise more visibility of the issue in region and to coordinate future road safety activities in the Asia Pacific region.