Regional EST Policy Dialogue and Training Workshop for South Asia and South-East Asia
10-12 October 2017, Pathumthani, Thailand

Road Safety in Asia and the Pacific
and
The Updated Regional Road Safety Goals and Targets for Asia and the Pacific 2017-2020
Content

Key topics

▪ Road Safety: Regional status and situation

▪ The updated Regional Road Safety Goals and Targets for Asia and the Pacific 2016-2020
In Asia-Pacific region, 1 person is being killed on the road in every 40 seconds.

More than 2,000 lives a day.
More than 15,000 lives a week.
Road Safety Situation

Global Mandate

UN GA Resolution 64/255 of 2 March 2010 on Improving Road Safety Proclaimed the period 2011-2020 as the Decade of Action for Road Safety

Ministerial Declaration on Improving Road Safety in Asia and the Pacific (Nov2006)

Regional Road Safety Goals, Targets and Indicators 2007-2015

Goal is to stabilize and then reduce the forecast level of road traffic fatalities around the world by increasing activities conducted at the national, regional and global levels

Sustainable Development Goals

Goal 3: Target 3.6: By 2020, halve the number of global deaths and injuries from road traffic accidents
Goal 11: Target 11.2: By 2030, provide access to safe, affordable and sustainable transport for all, improving road safety...

Global VS Regional goals

2006

2011
Decade of Action

2015

2020
Global Mandate

ESCAP Ministerial Conference on Transport, Moscow, December 2016

The updated Regional Road Safety Goals and Targets for Asia and the Pacific 2016-2020 has been adopted

The overall objective

“50 per cent reduction in fatalities and serious injuries on the roads of Asia and the Pacific over the period 2011 to 2020”

maintain the 8 goals with additional elements in each goals including the use of ITS, safe public t.

Road Safety Situation

2006

2011

Decade of Action

2015

2020
Road Safety Situation in Asia-Pacific

- Road traffic injuries are a leading cause of death and disability in the regions
- Over 733,000 deaths in 2013 (approx. 59% of 1.25 m global road deaths), 5.6% reduction compared to 2010
- Economic cost of road fatalities = 1-3% of GDP
- 23 countries have shown progress in the reduction
## Road Safety Situation in Asia-Pacific

<table>
<thead>
<tr>
<th>Country</th>
<th>Estimated losses due to road traffic crashes (2013)</th>
<th>Estimated GDP lost (%)</th>
<th>Estimated lost (million USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Armenia</td>
<td>1</td>
<td></td>
<td>104.39</td>
</tr>
<tr>
<td>Australia</td>
<td>2.1</td>
<td></td>
<td>32,103.98</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>1.6</td>
<td></td>
<td>2,456.08</td>
</tr>
<tr>
<td>Cambodia</td>
<td>2.1</td>
<td></td>
<td>324.45</td>
</tr>
<tr>
<td>India</td>
<td>3</td>
<td></td>
<td>58,082.64</td>
</tr>
<tr>
<td>Indonesia*</td>
<td>2.9-3.0</td>
<td></td>
<td>22,652.82</td>
</tr>
<tr>
<td>Iran (Islamic Republic of)</td>
<td>6</td>
<td></td>
<td>30,697.26</td>
</tr>
<tr>
<td>Japan</td>
<td>1.3</td>
<td></td>
<td>63,954.64</td>
</tr>
<tr>
<td>Lao People's Democratic Republic</td>
<td>2.7</td>
<td></td>
<td>290.52</td>
</tr>
<tr>
<td>Malaysia</td>
<td>1.5</td>
<td></td>
<td>4,697.37</td>
</tr>
<tr>
<td>Myanmar</td>
<td>0.5</td>
<td></td>
<td>310.71</td>
</tr>
<tr>
<td>Nepal</td>
<td>0.8</td>
<td></td>
<td>145.82</td>
</tr>
<tr>
<td>New Zealand</td>
<td>1.6</td>
<td></td>
<td>3,031.90</td>
</tr>
<tr>
<td>Philippines</td>
<td>2.6</td>
<td></td>
<td>7,073.74</td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>1</td>
<td></td>
<td>13,056.05</td>
</tr>
<tr>
<td>Russian Federation*</td>
<td>1.9</td>
<td></td>
<td>28,973.42</td>
</tr>
<tr>
<td>Thailand</td>
<td>3</td>
<td></td>
<td>12,605.01</td>
</tr>
<tr>
<td>Turkey*</td>
<td>1.1</td>
<td></td>
<td>8,042.58</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>2.9</td>
<td></td>
<td>4,965.44</td>
</tr>
<tr>
<td><strong>Total (19 countries)</strong></td>
<td></td>
<td></td>
<td><strong>293,568.83</strong></td>
</tr>
</tbody>
</table>
Road Safety Situation

Road Safety Situation in Asia-Pacific

Road Traffic Fatalities and Fatality Rate in the ESCAP region, 2013

ESCAP Average 18.99

Members and associate members in the ESCAP Region

- Road Traffic Fatalities
- Fatality rate per 100,000 populations
The change in number of road traffic fatalities in ESCAP member States between 2010 and 2013
# Road Safety Situation in Asia-Pacific

## The change in road traffic fatalities between 2010 and 2013

<table>
<thead>
<tr>
<th>Countries with a reduction (per cent)</th>
<th>Countries without reduction (per cent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palau -66.67 Republic of Korea -12.57</td>
<td>Micronesia (F.S.) no change Mongolia 21.59</td>
</tr>
<tr>
<td>Kiribati -50 India -10.16</td>
<td>Samoa no change Philippines 22.12</td>
</tr>
<tr>
<td>New Zealand -31.66 Japan -9.87</td>
<td>Malaysia 0.62 Bangladesh 23.29</td>
</tr>
<tr>
<td>Georgia -24.96 Australia -8.14</td>
<td>Viet Nam 3.55 Sri Lanka 29.33</td>
</tr>
<tr>
<td>Singapore -23.94 Thailand -7.89</td>
<td>Uzbekistan 4.28 Tonga 33.33</td>
</tr>
<tr>
<td>Afghanistan -23.76 Fiji -5.56</td>
<td>Vanuatu 7.69 Solomon Islands 36.71</td>
</tr>
<tr>
<td>Turkey -23.65 China -5.3</td>
<td>Cambodia 8.39 Papua New Guinea 38.12</td>
</tr>
<tr>
<td>Lao PDR -23.3 Armenia -2.15</td>
<td>Kazakhstan 13.35 Myanmar 50.61</td>
</tr>
<tr>
<td>Azerbaijan -21.55 Nepal -1.55</td>
<td>Bhutan 18.75 Maldives 100</td>
</tr>
<tr>
<td>Pakistan -14.44 Iran Islamic Rep. of</td>
<td>Kyrgyzstan 19.37 Cook Islands 150</td>
</tr>
<tr>
<td>Timor-Leste -14.16</td>
<td></td>
</tr>
</tbody>
</table>

**ESCAP Average**: -5.60
Road Safety Situation in Asia-Pacific

- At subregional level, 3 subregions show progress over 2010 and 2013.

- Pacific and North and Central Asian subregions’s road fatalities figure has increased.

- South and South-West Asia and East and North-East Asia subregion outperform the region’s average in the reduction of road fatalities.
Road Safety Situation in Asia-Pacific

Estimated reduction of road traffic fatalities
2010 - 2020

- Current
- Required
• 2009 was the first time ever that the majority of the world’s population lived in a city

In Asia

• By 2020, the urban population of the Asia-Pacific region is expected to surpass 50 percent, and in 2050 it is estimated that over 3 billion people will live in the region’s urban areas.

• This continuous growth of urban residents has resulted in rapid increases of transport activities and private vehicle ownership.
Some common characteristics of urban areas in developing countries

- Rapid increase in population and motorization
- Densely populated
- Road users compete for limited space
- Traffic mix

→ Frequent and close interaction between vulnerable and motorized road users

→ Urban road safety is to a large degree an issue of vulnerable road user safety.
Motorcyclists, pedestrians and cyclists are more vulnerable in the region.

VRUs account for more than half (55%) of total deaths.

Cambodia, Kiribati, Palau, Singapore, Sri Lanka and Thailand are among countries in ESCAP region that have over 80% of VRU share of total traffic fatalities (Viet Nam – no data available).
Road Safety Situation

Road Safety Situation in Asia-Pacific

Distribution of road traffic death by type of road users
ESCAP subregions 2013

- 4-wheeler
- Others
- Pedestrian
- Cyclist
- 2-wheelers

East and North-East Asia
South-East Asia
South and South-West Asia
North and Central Asia
Pacific
“Enable increased mobility without compromising safety”

- The VRU or vulnerable road users such as two and three-wheeler users and pedestrians and are at greater risk and bear greater burden of injury due to variety and intensity of traffic mix (especially slow moving VS fast moving vehicles) and lack of separation from other road users (OECD).

- The VRU especially pedestrian and cyclists – to a certain degree are those from the poorest of the community (urban poor).

- Pedestrians often being neglected from the planning of urban road networks (designed for motor vehicles only) (DFID).

→ human traffic congestion
→ increased exposure of traffic accidents
Road Safety Situation

Road Safety Situation in Asia-Pacific

Target Actions

– Improve infrastructure safety designs and safe environment for VRUs (especially Non-Motorised Transport Users)

– Improve enforcement and changing behavior or road users to avoid dangerous traffic offences e.g. helmet wearing, speeding

– Awareness raising, Education and Campaigns

– Improve emergency response
One of the problems is inadequate separation of pedestrians from vehicles / separation of non-motorized slow moving to motorized fast moving vehicles

- Footpaths not available (low quality, obstructed, illegally used by motorized vehicles)
- Lack of road shoulders
- Lack of medians
- Few safe crossing points or long distances between safe crossing points
- No bicycle lanes
- Not enough light (night time)
Road Safety Situation in Asia-Pacific
Road Safety Situation

Road Safety Situation in Asia-Pacific
Road Safety Situation

Road Safety Situation in Asia-Pacific

Source: Mirror Star
Poor road user behavior - one of the major cause of accidents

Road Safety requires variety of measures. In addition to engineering, enforcement, awareness raising and education are also needed

*Behavioral and cognitive psychological theory:*

- people modify behaviors as a result of
  - new information, experiences and perceptions
  - rewards and punishment
ESCAP Regional Road Safety Goals and Targets

Updated Regional Road Safety Goals and Targets
ESCAP Regional Road Safety Goals and Targets

Updated Regional Road Safety Goals and Targets

**Overall objective**
50 per cent reduction in fatalities and serious injuries on the roads of Asia and the Pacific over the period 2011 to 2020.

<table>
<thead>
<tr>
<th>Goals and Targets</th>
<th>Indicators for Monitoring Achievements</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Reduce the fatality rates by 50 per cent from 2011 to 2020.</td>
<td>1. Number of road fatalities (and fatality rates per 100,000 inhabitants).</td>
</tr>
<tr>
<td>b) Reduce the rates of serious road injuries by 50 per cent from 2011 to 2020.</td>
<td>2. Number of serious road injuries (and injury rate per 100,000 inhabitants).</td>
</tr>
</tbody>
</table>
Goal 1: Making road safety a policy priority

a) Create a road safety policy/strategy, designate a lead agency and implement a plan of action.

b) Allocate sufficient financial and human resources to improving road safety.

3. Information on existing national road safety policy, strategy, plan of action, and their implementation

4. Name of designated lead agency on road safety. Description of responsibilities of local, regional and national government organizations, including related coordination mechanism at the national level.

5. National road safety reports or impact evaluation reports of government programmes.

6. Information on the amount of funding and number of qualified human resources allocated to road safety projects and programmes (public, private and donors) and research and development to create a safer road environment.
### ESCAP Regional Road Safety Goals and Targets

**Updated Regional Road Safety Goals and Targets**

#### Goal 2: Making roads safer for vulnerable road users, including children, elderly people, pedestrians, non-motorized vehicle users, motorcyclists and persons with disabilities

<table>
<thead>
<tr>
<th>a) Reduce by 50 per cent the pedestrian death rate in road crashes.</th>
<th>7. Numbers of pedestrian deaths.</th>
</tr>
</thead>
<tbody>
<tr>
<td>b) Increase the number of safe crossings for pedestrians (e.g. with subway, overhead crossings or traffic signals).</td>
<td>8. Number of new safe crossings or improvements constructed or planned.</td>
</tr>
<tr>
<td>c) Make the wearing of helmets the norm and ensure minimum helmet quality, in order to reduce the motorcyclist death rate by 50 per cent (or reduce it to below the average motorcyclist death rate of the ESCAP region).</td>
<td>9. Number of motorcyclist deaths and motorcyclist deaths per 100,000 inhabitants.</td>
</tr>
<tr>
<td>10. Existing laws or administrative rules for the mandatory use of helmets and specifying minimum helmet quality standards. Information on helmet use (percentage).</td>
<td></td>
</tr>
</tbody>
</table>
### ESCAP Regional Road Safety Goals and Targets

#### Updated Regional Road Safety Goals and Targets

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>d) Ensure minimum child safety measures, in order to reduce the child death rate by 50 per cent.</td>
<td>11. Number of child fatalities in road crashes.</td>
</tr>
<tr>
<td></td>
<td>12. Existing laws or administrative rules on measures for child safety in cars (child restraints) and on motorcycles (child helmets).</td>
</tr>
<tr>
<td></td>
<td>13. Use of child seat restraints and child helmets (percentage).</td>
</tr>
<tr>
<td>e) Equip all school children with basic road safety knowledge.</td>
<td>14. Existing or planned education programmes on road safety in school, starting class and its coverage.</td>
</tr>
<tr>
<td>f) Ensure safe transportation access to elderly people and persons with disabilities.</td>
<td>15. Information on safe transportation access to elderly people and persons with disabilities.</td>
</tr>
</tbody>
</table>
### Goal 3: Making roads safer and reducing the severity of road crashes ("self-explaining" and "forgiving roads")

<table>
<thead>
<tr>
<th>16.</th>
<th>Number of, and information about, road safety audits carried out for road design, new road construction and major improvements.</th>
</tr>
</thead>
<tbody>
<tr>
<td>17.</td>
<td>Number of improvement programmes carried out to make roads “forgiving” (e.g. addressing black spots, removing or cushioning roadside obstacles).</td>
</tr>
<tr>
<td>18.</td>
<td>Existing length of pedestrian and bicycle tracks in kilometres per 100,000 people or per 10,000 kilometres of roads (along highways and city roads). Programme to construct pedestrian and bicycle track.</td>
</tr>
</tbody>
</table>

**a) Integrate a road safety audit into all stages of road development starting at the design stage, conduct road safety inspection, carry out necessary improvement works, and improve hazardous locations.**

**b) Increase separate/secure road space for pedestrians and cyclists in urban and suburban areas (where space permits).**
Goal 4: Making vehicles safer and encouraging responsible vehicle advertising

- a) Make regular inspection of road vehicles mandatory and ensure enforcement of inspection (starting in urban areas).
- b) Ensure safety requirements for new vehicles are in line with international standards.

- 19. Existing laws or administrative rules on vehicle inspection, frequency of inspection (annual), number of vehicle inspection facilities and organizations.
- 20. Existing laws and regulations specifying vehicle safety standards and implementation.
### Goal 5: Improving national and regional road safety systems, management and enforcement

| b) Implement a national (computerized) database, including a mobile reporting system where possible, that provides information on road crashes. | 22. Information on existing integrated road safety database and responsible organizations. |
| c) Aim to provide road safety at the stage of road network planning. | 23. The existence of definitions of road fatality and serious injury being used for data collection, with an indication as to whether they are based on internationally accepted definitions. |
| d) Introduction of laws and regulations regarding mandatory use of helmets and seat belts, drinking and driving, use of mobile phones and speed limits. | 24. Information about the incorporation of road safety at the stage of road network planning. |
| 25. Information on laws or administrative rules on compliance regarding helmet use (including percentage use). |
| 26. Information on laws or administrative rules on compliance regarding seat-belt use and use of mobile phones (including percentage use). |
| 27. Information on laws or administrative rules on compliance regarding drinking and driving and speed limits. |
e) Allow alcohol tests for prosecution (breathalyser and/or behavioural tests).

f) Make it the general practice to keep motorcycle headlights on at all times.

g) Increase responsiveness to post-crash emergencies and improve the ability of health and other systems to provide appropriate emergency treatment and early rehabilitation for crash victims.

h) Apply new technologies in traffic management and intelligent transport systems, including navigation systems, to mitigate the risk of road traffic crashes and maximize response efficiency.

28. Information on existing alcohol-level testing rules and types of tests and alcohol limits used and allowed for prosecution.

29. Information on existing laws or administrative rules on keeping motorcycle headlights on while driving.

30. Information on a single nationwide telephone number for use in case of emergencies including road crashes.

31. Information on rehabilitation services.

32. Information on the use of intelligent transport systems in improving road safety.
Goal 6: Improving cooperation and fostering partnerships

a) Encourage and recognize initiatives sponsored by the private sector.

b) Create new and deepen existing partnerships with non-governmental organizations.

33. Number of major partnerships in the area of road safety, funding (private sector and public-private initiatives).

34. Number, scope and funding of major partnerships with non-governmental organizations.
### Goal 7: Developing the Asian Highway network as a model of road safety

<table>
<thead>
<tr>
<th>a) Reduce the total number of fatalities and road crashes on the Asian Highway network.</th>
<th>35. Total number of fatalities and road crashes on the Asian Highway network in each country per year.</th>
</tr>
</thead>
<tbody>
<tr>
<td>b) Reduce the number of fatalities on all Asian Highway network segments to less than 100 per billion vehicle-kilometres.</td>
<td>36. Number of fatalities per billion vehicle-kilometres for each Asian Highway network segment per year.</td>
</tr>
<tr>
<td>c) Increase resource allocation for measures related to road safety along the Asian Highway network.</td>
<td>37. Amount of resources allocated to safety-related works for Asian Highway network segments from Governments and donors.</td>
</tr>
<tr>
<td>d) Improve Asian Highway network segments to be forgiving to road users if a crash occurs; demonstrate best practice.</td>
<td>38. Information on road safety assessment and rating programme for the Asian Highway network.</td>
</tr>
</tbody>
</table>
ESCAP Regional Road Safety Goals and Targets

Updated Regional Road Safety Goals and Targets

Goal 8: Providing effective education on road safety awareness to the public, young people and drivers

a) Carry out targeted awareness campaigns and training programmes.

39. Information on the number of national road safety awareness campaigns and training programmes carried out.

b) Introduction of policies to reduce work-related road traffic crashes.

40. Information on policies to regulate and improve professional drivers’ work conditions.
Goal 8: Providing effective education on road safety awareness to the public, young people and drivers

a) Carry out targeted awareness campaigns and training programmes.

b) Introduction of policies to reduce work-related road traffic crashes.

39. Information on the number of national road safety awareness campaigns and training programmes carried out.

40. Information on policies to regulate and improve professional drivers’ work conditions.
Projects and activities

UNESCAP Road Safety Activities

Project: Development of technical standards on road infrastructure safety facilities and model ITS deployments for the Asian Highway (AH) Network

Partner/Donor: Korea Expressway Corporation (KEC)

Expected accomplishment: to improve road safety and road traffic management along the AH network through the development of technical standards for road infrastructure safety facilities and model intelligent transport systems (ITS) deployments.

Outputs: Establishment of road safety facility infrastructure standards, Development of model intelligent transport systems deployments, Development of strategies to promote and facilitate the implementation of the AH design standards, Sharing of knowledge and know-how

Implementing countries: ESCAP region

Duration: March 2015– Dec 2017
Projects and activities

UNESCAP Road Safety Activities

Project: Black spot improvement

Partner: Korea Transportation Safety Authority (KOTSA)

Objectives: To provide technical assistance and capacity building on making roads safer and reducing the severity of road crashes through black spots improvement

Activities: Black spots inspection, Recommendations for black spots improvement, capacity building workshops

Implementing countries: Fiji, Viet Nam, Mongolia

Duration: 2015– Dec 2016
Projects and activities

Projects

Strengthening national road safety management capacities for selected developing countries and countries with economies in transition

National Workshops

Development of national strategy with measurable goals, targets and timeframe – conducted in Cambodia, Mongolia, Uzbekistan, Tajikistan, Philippines, Azerbaijan, Lao PDR, and Sri Lanka

Harmonization of road traffic rules, road signs and signals – conducted in Sri Lanka and Viet Nam

Recent activities

International conference on city and transport: Safety, Efficiency and Sustainability, Khabarovsk, Russian Federation, 2-5 September 2017

Subregional workshop on the implementation of the updated Regional Road Safety Goals and Targets for Asia and the Pacific 2016-2020, Phnom Penh, 27-28 September 2017
Road Safety Situation

Road Safety Situation in Asia-Pacific

• Wearing a good-quality helmet can reduce the risk of death from a road crash by 40 per cent and the risk from severe injury by over 70%.

• A 5% cut in average speed can reduce the number of fatal crashes by as much as 30%. Pedestrians and cyclists are especially at risk of an injury as a result of excessive vehicle speeds.

• Above a blood-alcohol concentration (BAC) of 0.05 g/dl, the risk of road traffic crash increases dramatically.

Source: WHO
Thank you

www.unescap.org/our-work/transport
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