

# Road Safety on the Asian Highway

By Lori Mooren, ARRB Group



Rapid economic development is a welcomed relief from the devastating poverty affecting families living in some Asian countries. However, this development also brings other problems. As economies grow, so must the road and transport infrastructure.

And with this growth in infrastructure the exposure to road traffic injury risk also grows – all too often resulting in dramatic rises in road deaths and serious injury crashes. This is an important dilemma for the Governments of these countries.

The Executive Director of the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) advises that, last year an estimated \$170 billion was spent on Asian roads and more than \$20 billion are currently being spent or committed for the Asian Highway. But unfortunately, this impressive economic success of Asia has been at the expense of the continent having the worst road safety record in the world. Last year more than half a million people were killed and 20-30 million injured in road crashes, at an economic cost of some \$100 billion.

UNESCAP covers the largest UN Region spanning from Australia and the Pacific nations to Turkey and the Russian Federation. A major project coordinated by UNESCAP is the *Asia Highway Project*. This project is securing intergovernmental agreements by member nations to bring conformity to classification and design standards for all routes of this highway network that spans across the Region. The idea is that putting good standards and practices in place – including safety standards – on a network that touches most of its member nations will assist to provide a tangible model of good practice to be applied on other roads as well.

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In the ESCAP meeting of member nations in Busan, Korea in November, 2006, a historic *Ministerial Declaration on Improving Road Safety in Asia and the Pacific* to “develop the Asian Highway as a model of road safety”<sup>1</sup> was adopted. Following a further resolution in May, 2007 which “encouraged members to continue to act upon the recommendations contained in the Ministerial Declaration”<sup>2</sup>, UNESCAP convened an Expert Group Meeting on Improving Road Safety on the Asian Highway. This was organised with the objectives to: (a) share experiences on how to improve road safety on the Asian Highway Network; (b) discuss resource requirements, priorities, possible partnerships and funding sources and financing; and to (c) discuss (road-related) follow-up actions to the Ministerial Declaration on Improving Road Safety in Asia and the Pacific.

The Expert Group Meeting was held in Bangkok on 21-22 June 2007, chaired by the Secretariat of the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP). The Meeting was attended by (mostly road authority) participants from the following member countries: Afghanistan, Armenia, Azerbaijan, Bangladesh, Bhutan, Brunei Darussalam, Cambodia, China, Democratic Republic of Korea, France, Georgia, India, Indonesia, Islamic Republic of Iran, Japan, Kyrgyzstan, Lao People’s Democratic Republic, Malaysia, Mongolia, Myanmar, Nepal, Pakistan, Philippines, Republic of Korea, Russian Federation, Singapore, Sri Lanka, Tajikistan, Thailand, Turkey, Uzbekistan.

In addition representatives of the Road Administration of Sweden, the Asian Development Bank, ARRB Group, Automobile Association of Malaysia, Asia Injury Prevention Foundation, Automobile Association of the Philippines, Global Road Safety Partnership, Handicap International Belgium, International Federation of Pedestrians, International Road Assessment Programme, IRU, Korea Transport Institute, Korea International Cooperation Agency (KOICA), National Road Safety Council of Armenia, Volkmann & Rossbach GmbH & Co. attended the Meeting.

Beyond the Asia Highway project, the ESCAP members have adopted a set of goals and targets for road safety, as well as specific indicators for monitoring achievements.

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1 Report of the Ministerial Conference on Transport, ESCAP document E/ESCAP/63/13, [http://www.unescap.org/EDC/English/Commissions/E63/E63\\_13E.pdf](http://www.unescap.org/EDC/English/Commissions/E63/E63_13E.pdf)

2 ESCAP resolution 63/9 (“Implementation of the Busan Declaration on Transport Development in Asia and the Pacific and the Regional Action Programme for Transport Development in Asia and the Pacific, phase I (2007-2011)”), [http://www.unescap.org/EDC/English/Resolutions/2007\(63\)Resolutions.pdf](http://www.unescap.org/EDC/English/Resolutions/2007(63)Resolutions.pdf)

## UNESCAP Road Safety Goals of Asia and the Pacific, 2007-2015

Goals and Targets	Indicators for monitoring achievements
<b>Overall Objective:</b> Saving 600,000 lives and preventing a commensurate number of serious injuries on the roads of Asia and the Pacific over the period 2007 to 2015	
a) Reduce the fatality rates by twenty percent from 2007 to 2015 (or reduce it to less than 10 per 10,000 motor vehicles by 2015).	1) Number of road fatalities (and fatality rates per 10,000 motor vehicles, per motor vehicle-km and per passenger-km). 2) Number of anticipated road fatalities (baseline). 3) Number of road crashes. 4) "Fleet safety records" of public or private organisations (e.g. deaths per 100,000 km).
b) Reduce the rates of serious road injuries by twenty percent from 2007 to 2015.	5) Number of anticipated serious injuries on roads (baseline). 6) Number of serious road injuries (and injury rate per 10,000 motor vehicles and per motor vehicle-km).
<b>Goal 1: Making road safety a policy priority</b>	
a) Create a road safety policy/strategy, designate a lead agency and implement a plan of action, by 2010.	7) Documents of road safety policy, strategy, and plan of action etc. Information on their actual implementation. 8) Name of designated lead agency. Description of responsibilities of local, regional and national government organizations. 9) National road safety reports or impact evaluation reports of government programmes.
b) Allocate sufficient financial and human resources to improving road safety.	10) Amount of public financial and human resources allocated to road safety. 11) Amount of private sector contributions, as well as special funds, from donors, or relevant financial institutions. 12) Road safety programmes and activities conducted. At least one major national road safety campaign.
<b>Goal 2: Making roads safer for vulnerable road users, including children, senior citizens, pedestrians, non-motorized vehicle users, motorcyclists, and persons with disabilities</b>	
a) Reduce by one third the pedestrian death rate in road crashes (or reduce it to less than 1 per 10,000 motor vehicles).	13) Pedestrian deaths per head of population and per 10,000 motor vehicles.
b) Increase the number of safe crossings for pedestrians (e.g. with subway, overhead crossings or traffic signals).	14) Number of safe crossings, or information on programmes for constructing or improving crossings.
c) Make the wearing of helmets the norm and ensure minimum helmet quality, in order to reduce the motorcyclist death rate by one third (or reduce it to below the average motorcyclist death rate of the ESCAP).	15) Motorcyclist deaths and motorcyclist death rate. 16) Law or administrative rule (Yes/No). (Survey) information on helmet use (percentage) and minimum helmet quality standards.
d) Ensure minimum child safety measures, in order to reduce the child death rate by one third (or reduce it to less than 0.01 per 10,000 motor vehicles).	17) Death rate of children less than 5 years in road crashes. 18) (Survey) information on the following of child safety norms (e.g. child restraints) (percentage). 19) Existing measures for child safety in cars and on motorcycles (qualitative indicator).
e) Equip all school children with basic road safety knowledge.	20) Road safety education part of the school curriculum (Yes/No). 21) Existing education programs on road safety (qualitative indicator).
<b>Goal 3: Making roads safer and reducing the severity of road crashes (building "forgiving roads")</b>	
a) Integrate road safety audit in all stages of road development starting at the design stage, carry out necessary improvement works, and improve hazardous locations.	22) Road safety audit programme (Yes/No); Blackspot programme (Yes/No). 23) Extent to which road safety audits are carried out for new road constructions and major improvements (estimated share of all cases). 24) Programmes to make roads "forgiving" by removing or cushioning roadside obstacles.
b) Increase separate/secure road space for pedestrians and cyclists in urban and peri-urban areas (where space permits).	25) National or local programmes. Existing length of pedestrian and bicycle tracks in kilometres per 100,000 people (along highways and city roads).
<b>Goal 4: Making vehicles safer and encourage responsible vehicle advertising</b>	
a) Make regular inspection of road vehicles mandatory and ensure enforcement of inspection (starting in urban areas).	26) Law or administrative rule (document). Information on vehicle inspection facilities and organizations (qualitative).
b) Ensure safety requirements for new vehicles to be in line with international standards.	27) Documents specifying laws and regulations and implementation.

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## UNESCAP Road Safety Goals of Asia and the Pacific, 2007-2015 (continued)

Goals and Targets	Indicators for monitoring achievements
<b>Goal 5: Improving national and regional safety systems, management and enforcement</b>	
a) Implement a national (computerized) database that provides information on the location of road crashes.	28) Yes/No indicator. If yes, which database system and responsible organizations (qualitative indicator). 29) Country coverage of the regional APRAD database.
b) Significantly increase "compliance", e.g. with mandatory helmet, seat-belt wearing and speed limits.	30) Information on rules and "compliance" on helmet wearing levels (percentage from surveys). 31) Information on rules and "compliance" on seat-belt wearing levels (percentage from surveys). 32) Information on rules and "compliance" related to "drinking and driving" (information from surveys not prosecutions).
c) Allow alcohol tests for prosecution (either breathalyzer) and/or behavioural tests).	33) Yes/No. If yes, description of existing rules, types of tests and alcohol limits used and allowed for prosecution.
d) Make it the norm to keep motorbike front-lights on at all times.	34) Law or administrative rule (document). Description of existing practices (from survey), or technical measures.
e) Increase coverage of emergency assistance systems for road victims, to cover at least all urban areas and trunk roads.	35) Kilometres of road (by type) on which emergency services are provided. 36) Average response time. 37) Number of emergency service centres per length of highways (except city roads).
<b>Goal 6: Improving cooperation and fostering partnerships</b>	
a) Encourage and recognize private-sector sponsored initiatives.	38) Number of major private sector initiatives. (Financial) volume of commitments. 39) Number of major public-private partnerships in the area of road safety (Financial) volume.
b) Create new and deepen existing partnerships with NGOs.	40) Number of major private sector initiatives. (Financial) volume of commitments.
<b>Goal 7: Developing an Asian Highway as a model of road safety</b>	
a) Reduce the total number of fatalities and road crashes on the Asian Highway.	41) Total number road fatalities and road crashes on the Asian Highway in each country per year.
b) Reduce the number of fatalities on <i>all</i> Asian Highway segments to below 1,000 per 100 million vehicle-kilometres.	42) Number of fatalities per 100 million vehicle-kilometres for each Asian Highway segment per year.
c) Increase resource allocation for road safety-related measures along the Asian Highway.	43) (Financial and human) resources allocated for safety-related works for Asian Highway segments. 44) Amount of safety-related grants and loans for Asian Highway segments from international sources.
d) Improve Asian Highway road segments to be forgiving to road users if a crash occurs. Demonstrate best practise.	45) Develop a road safety rating program.
<b>Goal 8: Providing effective education on road safety awareness to the public, young people and drivers</b>	
a) Carry out targeted awareness campaigns and training programs.	46) Information on awareness campaigns and training programs carried out.

The ESCAP meeting delegates from member nations spoke candidly about their achievements and challenges to achieve road safety, sharing specific experiences as well as positive outcomes being achieved – or not.

Presentations delivered by international delegates, such as the ARRB Group, International Road Assessment Program and the Swedish Road Administration, offered ideas that could be considered for the enhancement of road safety in Asia. The ARRB representative spoke of the Australia experience and lessons in interagency collaboration, institutional strengthening and financing options. The Swedish

representative spoke of Sweden's Vision Zero policy framework and specific ways the Vision is being pursued with low cost road engineering practices. The iRAP representative showed how a network risk assessment could assist the Asia Highway Project to establish and measure safety ratings of Highway routes and sections.

The Meeting made recommendations about how best to pursue the general road safety goals as well as actions to improve the road safety effort on the Asian Highway project.<sup>3</sup>

<sup>3</sup> A full report on the Meeting can be obtained at

These include:

- ESCAP members to consider improving their data collection and reporting systems, in particular to annually provide the basic safety data contained in the Asian Highway database;
- ESCAP members to consider the carrying out network risk assessments in the region. In particular, to explore iRAP assessments of the Asian Highway Network;
- ESCAP members to explore the possibility of adopting a systems approach similar to the Vision Zero approach
- ESCAP members to seriously consider and explore all options for domestic financing of road safety, for example, through road funds, various user charges, insurance premium, etc., in line with good practices around the world;
- ESCAP to track the potential good experience in the ESCAP region with setting up road safety research institutes, and noted the catalytic role that these institutes have played in improving road safety.

The leadership approach and support being offered by the UNESCAP Secretariat is to be congratulated. The Meeting acknowledged this key role of ESCAP by requesting the Secretariat to: (a) to step up its support to national road safety programmes of ESCAP members, (b) to promote regional collaboration for improving the safety of the Asian Highway (towards a vision of zero accidents), (c) to promote time-tested safety devices such as seat-belts and helmets, (d) to support campaigns against drunken driving and for promotion of safe driving practices, (e) to provide training and capacity building, (f) promote sharing of best-practices in road safety in the region, (g) support networking of academic and research bodies, (h) promote the creation of simple and effective technical aids to make driver licensing procedure safe and foolproof, and (i) to facilitate safety-related research and development.

This is a good example of how the United Nations is putting into practice a proactive leadership approach to advancing road safety consistent with the goals of the World Report on Road Traffic Injuries.