UNITED NATIONS
ESCAP
Economic and Social Commission for Asia and the Pacific

4th IRTAD Conference Seoul
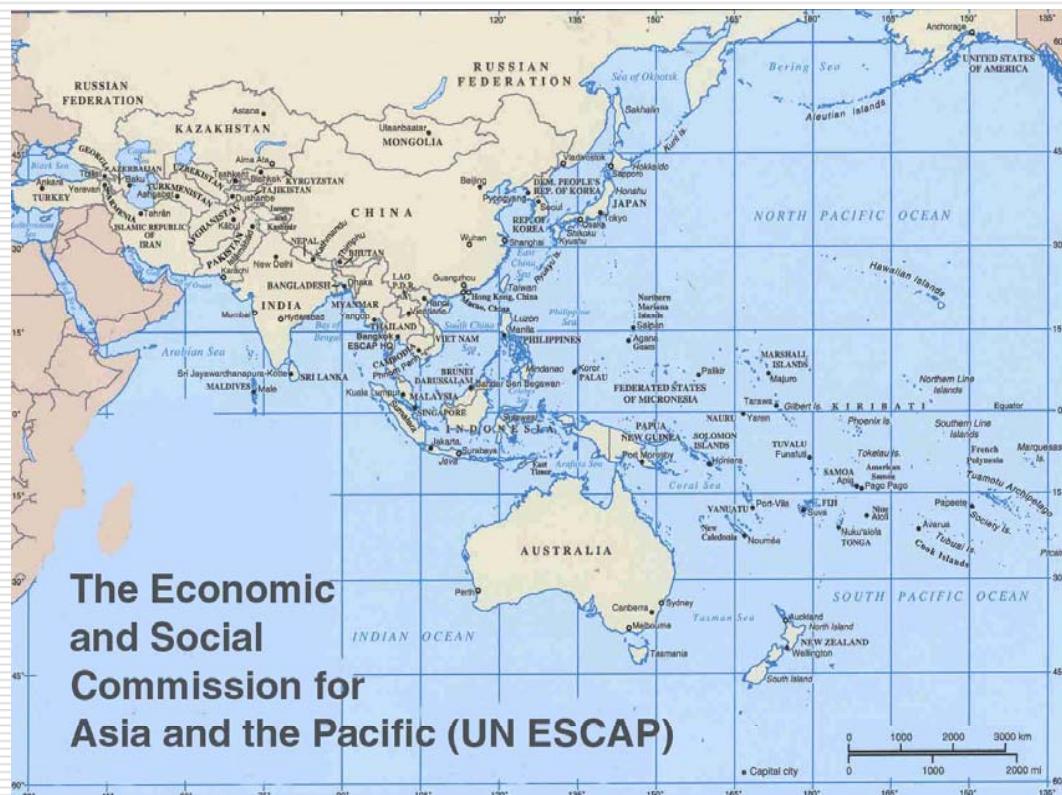**16-17 September 2009**

Road Safety Data Availability in Asia

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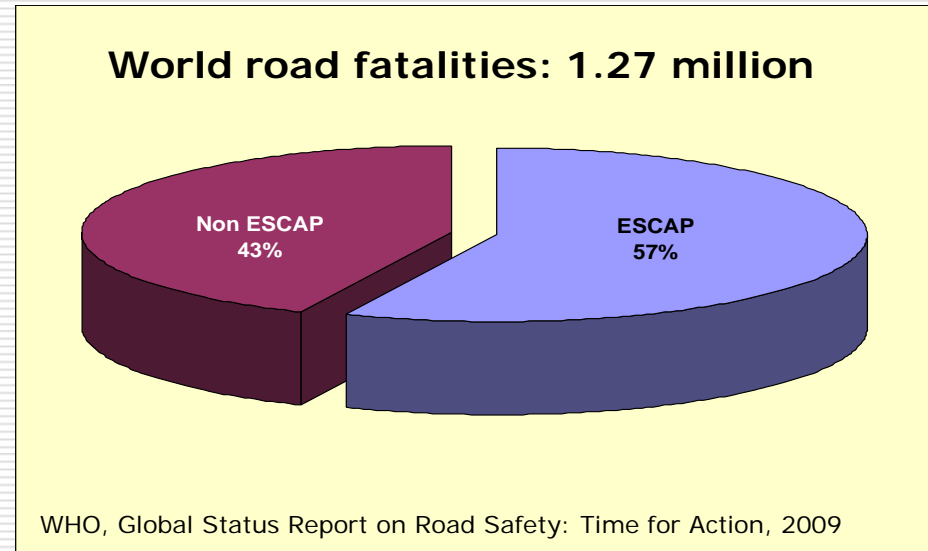
Commemorating 60 years in Thailand
1949 - 2009

- **4 billion people (62% of world population)**
- **26% of world GDP**
- **Engine of the world economy**
- **Key nodes in International Production Networks**
- **Unbalanced Development**
  - **Concentrated in coastal areas**
  - **635 million people in absolute poverty**

The Economic and Social Commission for Asia and the Pacific (UN ESCAP)

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- **57% of the world road fatalities occur in the ESCAP region, where only 43% of the world's road vehicles are registered.**

World road fatalities: 1.27 million

Non ESCAP 43%

ESCAP 57%

WHO, Global Status Report on Road Safety: Time for Action, 2009

- **ESCAP estimates that, unless additional measures are taken, about two thirds of the world's road deaths might be in the ESCAP region by 2020.**

- **ESCAP also estimates the economic cost of road accidents at $ 106 billion, equivalent to 2.3% of the GDP of the developing and transition economies in the ESCAP region.**

Since 2003	**General Assembly**	**5 Resolutions (57/309, 58/9, 58/289, 60/4 and 62/244) on improving global road safety have been adopted.**
2006	**ESCAP Ministerial Conference on Transport**	**ESCAP *Ministerial Declaration on Improving Road Safety in Asia and the Pacific* has been adopted**
		The Declaration includes the goal *"to save 600,000 lives and to prevent a commensurate number of serious injuries on the roads of Asia and the Pacific over the period 2007 to 2015"*
		The Declaration also invite member countries to *"develop the Asian Highway as a model for Road Safety"* ▶
2005	**Intergovernmental Agreement on Asian Highway Network**	**Parties to the Agreement have also made a formal commitment to give full consideration to issues of road safety.** ▶

ASIAN HIGHWAY ROUTE MAP

UNITED NATIONS
2007

Legend
- Asian Highway Route
- Potential Asian Highway Route
- Ferry Link
- Capital City

The designations employed and the presentation of material on this map do not imply the expressing of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

Dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not been agreed upon by the parties.

Setting Regional Goals and Targets

The Ministerial Declaration requests the development of a set of goals, targets and indicators to be achieved by 2015

8 ESCAP Goals

Targets and indicators have been developed and defined at a series of ESCAP meetings and finalized in September 2009

Save 600,000 lives and prevent a commensurate number of serious injuries on the roads of Asia and the Pacific 2007 to 2015

1. Make Road Safety a policy priority

2. Make Road Safer for vulnerable road users

3. Make Road Safer and build "forgiving road"

4. Make vehicles safer and encourage responsible ads

5. Improve national and regional road safety system, management, & enforcement

6. Improve cooperation & fostering partnerships

7. Develop Asian Highway as a model for road safety

8. Provide effective education on road safety awareness

ESCAP road safety goals, targets and indicators	
Goals and targets	**Indicators for monitoring achievements**
Overall Objective: 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 20 per cent 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 road crashes.
b) Reduce the rates of serious road injuries by 20 per cent from 2007 to 2015.	3) Number of serious road injuries (and injury rate per 10,000 motor vehicles, and per motor vehicle-km).
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, by 2010.	4) Information on existing national road safety policy, strategy, and plan of action. 5) Name of designated lead agency. Description of reponsibilities of local, regional and national government organizations. 6) National road safety reports or impact evaluation reports of government programmes.
b) Allocate sufficient financial and human resources to improving road safety.	7) Amount of funding allocated to road safety programmes (public, private and donors).
Goal 2: Making roads safer for vulnerable road users, including children, senior citizens, pedestrians, non-motorized vehicle users, motorcyclists, and persons with disabilities	
a) Reduce by one third the pedestrian death rate in road crashes (or reduce it to less than 1 per 10,000 motor vehicles).	8) Numbers of pedestrian deaths or pedestrian deaths per 10,000 motor vehicles.
b) Increase the number of safe crossings for pedestrians (e.g., with subway, overhead crossings or traffic signals).	9) Information on programmes for construction of new safe crossings or improvement of 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 region).	10) Number of motorcyclist deaths and motorcyclist death per 10,000 motorcycles. 11) Existing law or administrative rule for mandatory use of helmets and specifying minimum helmet quality standards. Information on helmet use (percentage).
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).	12) Number of child fatality in road crashes. 13) Existing law or administartive rule on measures for child safety in cars (child restraints) and on motorcycles (child helmets). 14) Information on use of child seat restraints and child helmet.
e) Equip all school children with basic road safety knowledge.	15) Existing or planned education programmes on road safety in school, starting class and its coveragre.

ESCAP road safety goals, targets and indicators	
Goals and targets	**Indicators for monitoring achievements**
Goal 3: Making roads safer and reducing the severity of road crashes ("forgiving roads")	
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.	16) Extent to which road safety audits are carried out for new road construction and major improvements. 17) Number of improvement programmes carried out to make roads "forgiving" (e.g., blackspot, removing or cushioning roadside obstacles).
b) Increase separate/secure road space for pedestrians and cyclists in urban and suburban areas (where space permits)	18) Existing length of pedestrian and bicycle tracks in kilometres per 100,000 people or per 10,000 km of roads (along highways and city roads). Programme to construct pedestrian and bicycle tracks.
Goal 4: Making vehicles safer and encourage responsible vehicle advertising	
a) Make regular inspection of road vehicles mandatory and ensure enforcement of inspection (starting in urban areas).	19) Existing law or administrative rule on vehicle inspection, frequency of inspection (annual), number of vehicle inspection facilities and organizations.
b) Ensure safety requirements for new vehicles to be in line with international standards.	20) Existing law and regulation specifying vehicle safety standards and implementation.
Goal 5: Improving national and regional road safety systems, management and enforcement	
a) Implement a national (computerized) database that provides	21) Information on existing road safety database and responsible
b) Significantly increase "compliance", e.g., with mandatory helmet, seat-belt use, drinking and driving, use of mobile phone and speed limits.	22) Information on "compliance" on helmet wearing (percentage). 23) Information on rules and "compliance" on seat-belt use, use of mobile phone (percentage use). 24) Information on rules and "compliance" related to "drinking and driving" and speed limits.
c) Allow alcohol tests for prosecution (either breathalyzer and/or behavioural tests).	25) Existing alcohol level testing rules, types of tests and alcohol limits used and allowed for prosecution.
d) Make it the norm to keep motorcycle front-lights on at all times.	26) Information on exisiting law or administrative rule on keeping motorcyle headlight on while driving.
e) Increase coverage of emergency assistance systems for road victims, to cover at least all urban areas and trunk roads.	27) Kilometres of road (by type) on which emergency services are provided. 28) Average emergency response time. 29) Number of emergency service centres per length of highways (except city roads).

ESCAP road safety goals, targets and indicators	
Goals and targets	**Indicators for monitoring achievements**
Goal 6: Improving cooperation and fostering partnerships	
a) Encourage and recognize private-sector sponsored initiatives.	30) Number of major partnerships in the area of road safety, funding (private sector, public-private initiatives).
b) Create new and deepen existing partnerships with non-governmental organizations.	31) Number of major partnerships with NGO, scope and funding.
Goal 7: Developing the Asian Highway as a model of road safety	
a) Reduce the total number of fatalities and road crashes on the Asian Highway.	32) Total number of road fatalities and road crashes on the Asian Highway in each country per year.
b) Reduce the number of fatalities on *all* Asian Highway segments to below 100 per billion vehicle-kilometres.	33) Number of fatalities per billion vehicle-kilometres for each Asian Highway segment per year.
c) Increase resource allocation for road safety-related measures along the Asian Highway.	34) Amount of resources allocated to safety-related works for the Asian Highway segments from government and donors.
d) Improve Asian Highway road segments to be forgiving to road users if a crash occurs. Demonstrate best practise.	35) Information on road safety assessment and rating programme for the Asian Highway.
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	36) Information on number of national road safety awareness campaigns and training programmes carried out.

National road safety goals, targets and indicators

Road Safety Data Collection and Analysis System

Country	Data Collection and Analysis System
Armenia	Accident data collected from traffic police, Ministry of Health and traffic research group (ARD)
Bangladesh	First Investigation Report by Police Micro-Computer Accident Analysis Package (MAAP)
Bhutan	Vehicle and driver database are available but there is no on-line accident-location database *Accident database is still a major problem in the country*
Cambodia	Road Crash and Victim Information System (RCVIS) developed with technical support from Handicap International Belgium
India	Data collected and compiled by the Police *However, there are some inconsistencies of data and challenges on data analysis.*
Indonesia	Accident Data System conducted by the Police
Japan	Integrated database by ITARDA (Institute for Traffic Accident Research and Data Analysis)
Lao PDR	*Development of comprehensive road accident data system is part of the national action plan*

Road Safety Data Collection and Analysis System

| Country	Data Collection and Analysis System
Malaysia	Computerized Accident Recording Systems (CARS) MIROS Road Accident Analysis and Database System (M-ROADS)
Myanmar	*Development of comprehensive road accident data system is part of the national action plan*
Nepal	Nation-wide Accident Data Collection by Police *Data from the database is not sufficient to conduct accident analysis*
Pakistan	Road Safety Wing (RSW) was established to collect accident data and analyze it on scientific method
Philippines	Accident data system (Traffic Recording and Analysis System - TARAS) was established
Republic of Korea	Development of Transportation Safety Information Management System is included in the new transport safety plan (2008-2012)
Singapore	Traffic Accident Analysis Module (TAAM) National database TPRTA
Sri Lanka	All data is computerised and is in the process of developing a common database pertaining to the road sector.
Turkey	Computerized database
Viet Nam	*Development of comprehensive road accident data system is part of the national action plan*

Asia-Pacific Road Accident Database (APRAD)

- National-level data for the ESCAP region from 1980-2004; includes a graphing tool
- Background statistics; Economic significance; Personal injuries and deaths on the road; Road accidents
- Road accidents and fatalities
  - By casualty type, accident location, time of accident, road type and surface condition
- Road fatalities
  - By type of road users/vehicles, by age group and gender
- Limited data, not updated regularly

Asian Highway Database

- **Comprehensive data on the AH routes**
- **Road safety data: number of accidents and fatalities**
- **Can be linked to various infrastructure characteristics**
- **Available only for 43,400 km in 20 countries (31% of the total length of AH)**

Average fatality rates for each Asian Highway class
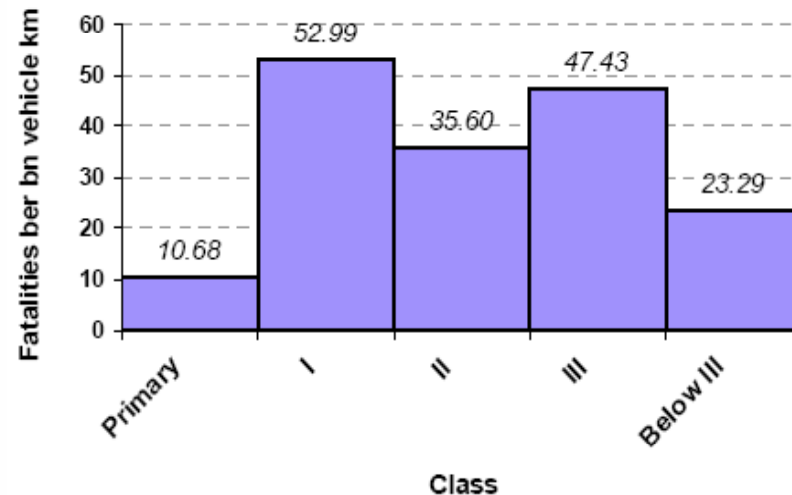
Data for ESCAP goals, targets and indicators

- For monitoring progress, evaluation of effectiveness of policy implementation and international comparison

- Updating data for base year 2007
  - Country reports (2006-2009)
  - WHO Report 2009 and other sources

- Data availability: different levels for different indicators and different countries

- Data reliability: a common problem
  - Underreporting: Reported number of fatalities in the ESCAP region represents only 52% of the data obtained from the model making adjustment for underreporting
  - Definition: 1/3 of ESCAP countries use the 30-day definition

Summary and Conclusions

- Accurate and reliable road safety data are essential in formulating national strategies and action plans, in targeting their policy interventions and in monitoring the progress and evaluating the effectiveness of their national road safety programmes.

- At the national level, there is an urgent need for collaboration among different sectors in collecting and reporting road safety data and in harmonizing definitions of road fatalities and injuries.

- At the regional level, the ESCAP will continue its efforts to provide assistance to member countries in collecting road safety data, particularly in relation to the ESCAP road safety goals, targets and indicators.

- ESCAP countries could also benefit from the experiences that ITF has gained in developing and maintaining IRTAD database.

Save 600,000 lives by 2015 with ESCAP

It's time for commitment.
It's time for action.

Th@nk you

Commemorating 60 years in Thailand
1949 - 2009