



**Working Group on Asian Highway Network
(13-15 December 2017)**

**Road Infrastructure Safety Facilities
Policies and Strategies**

D P Gupta

Director (Roads & Highways)

Asian Institute of Transport Development

(Former Director General - Road Development,

Ministry of Road Transport & Highways)

UN: ESCAP Initiatives

- **Heartening that UN:ESCAP with support from Korea Expressway Corporation has brought out Design Standards of Road Infrastructure Safety Facilities for the Asian Highway Network**
- **Overall, very good recommendations that cover the imperatives for enhancing road safety**
- **Social concerns need more emphasis**

Social Concerns

- **AITD undertook a World Bank sponsored study of socio-economic impact of Dhanbad-Agra National Highway (part of Asian Highway No.1)**
- **Study revealed:**
 - **Inadequate concern for needs of local communities**
 - **Fatalities due to head on collisions using same carriageway on divided highway**
- **Lessons**
 - **Safety not to adversely affect communities**
 - **Minimize burden of land acquisition, especially for multi-laning and green field projects**
 - **Conscious provision of underpasses for pedestrian and cattle crossings, highways to be elevated**
 - **Review national standards to provide safe and socially responsible roads**
 - **Built-in social concerns in road design**

An Imperative and Opportunity

- **Member countries could review their own national standards for the road network depending upon varying traffic conditions in terms of**
 - **Traffic Flow**
 - **Mix of motorized and non-motorized vehicles**
 - **Vehicle performance**
 - **Road users behaviour, culture, discipline (and even attitude)**
- **UN:ESCAP design standards do provide several harmonized principles as takeaways by member countries, notably**
 - **Self explaining road environment**
 - **Forgiving road design**
 - **Concept of star rating**

Safety on Radar of Government

- **Motor Vehicles Amendment Bill introduced in Parliament**
- **Intention to set up Road Safety and Traffic Management Board**
- **Stress on Road Safety Audits**
- **Supreme Court set up Committee to oversee actions on improving road safety by stakeholders**
- **Group of State Ministers set up to recommend safety measures**
- **Focus on safety is getting intensified**

Asian Institute of Transport Development

- **Has been facilitating knowledge creation in road safety**
- **Supported the Transportation and Injury Prevention Programme (TRIPP) of IIT, Delhi**
- **Made substantial contribution to Ministerial Declaration on Improving Road Safety in Asia-Pacific Region in 2006**
- **Recently, the Institute has been tasked by MORTH to serve as Apex Agency for Road Safety in India**

AITD: Apex Centre for Road Safety

- **Focus areas:**
 - **Infrastructure safety facility: Design and implementation**
 - **Safety audits**
 - **Training and capacity building of road departments throughout the country**
 - **Research agenda to support IRC in updating of standards**
 - **Design to incorporate safe facilities for VRUs**
 - **Traffic calming measures that suit mix traffic**
 - **Evidence based safety engineering measures**
- **Set up Centres of Excellence (COE) in various regions of the country**
 - **Identify IITs, NITs and other Institutions**
 - **Enter into MoUs with COE for**
 - **Training support**
 - **Research work**
 - **Updating IRC standards**

Promoting ITS: Traffic Management Centres

- **Simple IT and ITS solutions**
 - **Detect traffic violations, e-challans**
 - **Decongest arterial streets**
- **Cameras at signals/intersections**
 - **Zoom into number plate**
 - **Demand for fine (bluetooth printer)**
 - **Store data on violations in Traffic Police Database**
- **Adjust signal timings to the hold-up of vehicles at intersections**
- **Variable message signs**

Knowledge Production, Research and Institutional Linkages

- Lay stress on technology initiatives and knowledge production in enhancing safety
- Identify areas and subjects for research and collection of evidence from ground
- Commission research projects with support of academia and research institutions (recently pioneering work on design of roundabouts and country specific highway capacity norms in India)
- Create linkages between academic institutions at district, state and national level
- Network with international institutions
- Learn from international practices
- Ensure dissemination: workshops, seminars, interactive dialogues

Success Factors for Enhancing Road Safety

- **Orientation to social concerns and needs of local communities, VRUs and PwDs**
- **Exchange of scientific principles through international bodies like UN:ESCAP**
- **IRC to revisit its safety standards utilizing**
 - **UN:ESCAP design standards for RISF for AH Network**
 - **Local traffic conditions**
 - **Scientific principles**
 - **Evidence based research**
- **Embed safety engineering measures into road design**

Contd...

- **Enhance professional knowledge of road agencies, consultants and contractors through training and capacity building**
- **Create reservoir of Road Safety Auditors**
- **Enhance accountability of field engineers for implementation on the ground**
- **Promote use of IT and ITS in improving safety**
- **Every bit counts**
- **AITD committed to support the noble cause**

Thank you

***On behalf of AITD to provide us
opportunity to share these thoughts with
the Working Group on the Asian Highway***

asianinstitute.del@gmail.com