Joint ITU/UNECE Workshop on "Intelligent Transport Systems in Emerging Markets – drivers for safe and sustainable growth"

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Can emerging market countries succeed in leapfrogging to an ITS-enabled transportation infrastructure

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The Nine Beneficial Areas of ITS

	ITS development area	Description of development and achievements in major elemental technologies
1	Advances in navigation systems	Advances navigation systems with VICS, etc. → car navigation, VICS, etc.
2	Electronic toll collection systems	Non-stop payment at toll gate, etc. → ETC
3	Assistance for safe driving	Hazard warning and automated driving → ASV, AHS
4	Optimization of traffic management	Route guidance, traffic signal control, etc.
5	Increasing efficiency in road management	Management of specially permitted commercial vehicles and others, traffic control information, etc.
6	Support for public transport	Management of public transportation operation, etc.
7	Increasing efficiency in commercial vehicle operations	Assisting commercial vehicle operations and management, automated platooning, etc.
8	Support for pedestrians	Route guidance for pedestrians, etc.
9	Support for emergency vehicle operations	Automated emergency notification, disaster and accident announcemrnt, etc.

Prepared by the STFC based on References[4,6]

- **Intelligent**
- **Traffic Management Systems**

INTELLIGENT TRAFFIC MANAGEMENT SYSTEM (ITMS)

Intelligent Traffic Management System

Coordination

Definition: Roles & Responsibility

Capacity Governance

Basic Infrastructure & Infostructure

Presence of Transportation Planning

Legislative Sanction of Codes & Practices

Application of Traffic Engineering Practices

Design Standards for Roads & TCDs

Steps to ITMS

Design Standards for Roads & TCDs

Developed Countries

Need and Research Based

- USA – Manual of Uniform Traffic Control Devices – 2009

- Australia – Transport Operation Road Rules Regulations – 2009

- Europe – European Committee for Standardization

Emerging Countries (India)

Generally adopted without research

- Code of Practice for Road Markings-2001

- Code of Practice for Traffic Signals-1986

Application of Traffic Engineering Practices

Developed Countries

Traffic Engineering Centres were introduced in UK/USA in 1930/1932

Developing Countries (India)

- No Traffic Engineering Centres

- Negligible research on Traffic Engineering

- Standards not ratified to UN Convention of Signs and Signals

- Standards not conducive to mixed traffic conditions
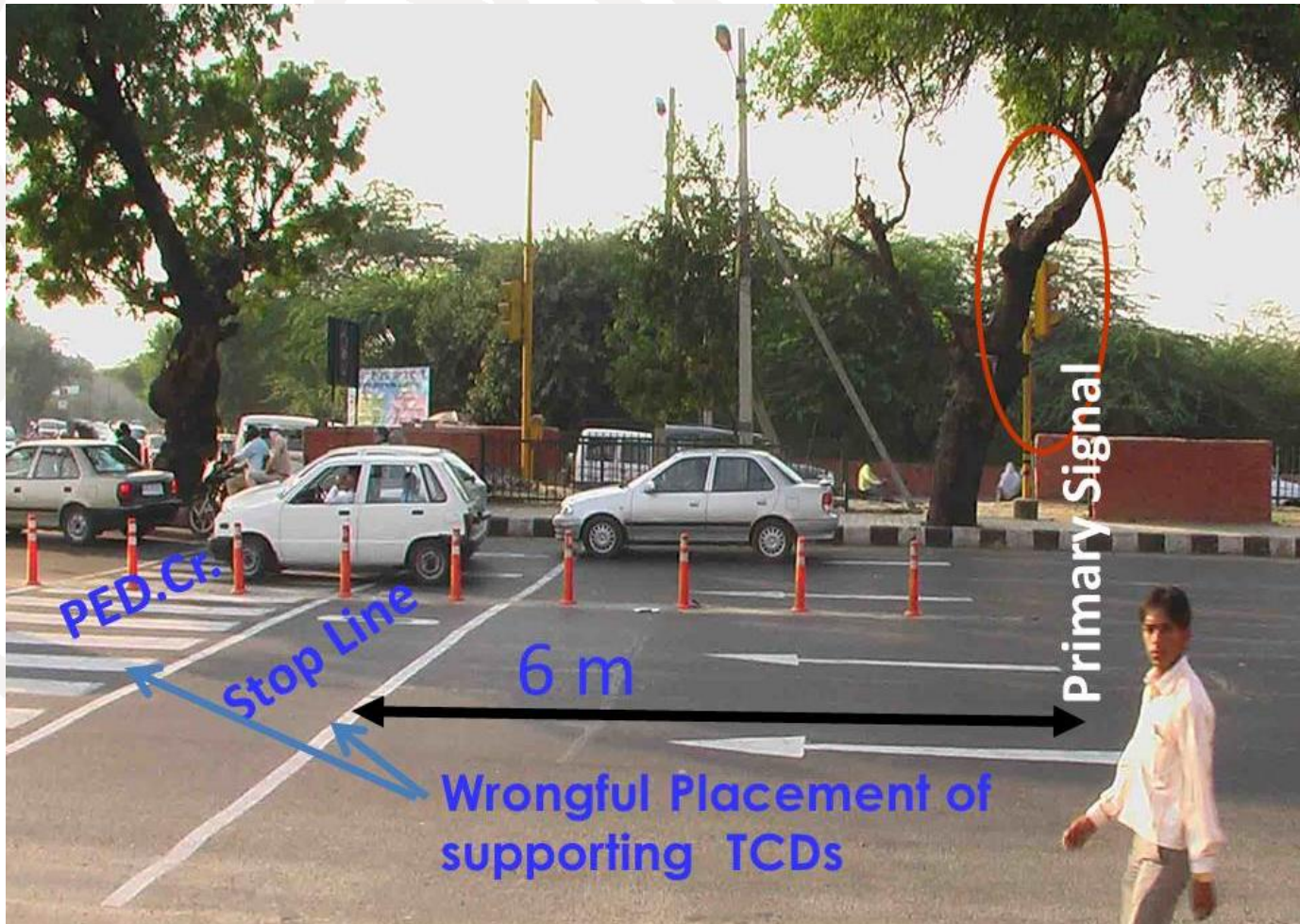
Road Designed for - 4Lanes

Legislation (India)

- Codes of Road Signals and Markings are not statutory

- Contradiction between Codes and Legislations

- Absence of a Highway Code (Quasi Legislation)

- No Legislation/Responsibility for Non Motorised Traffic

Roles & Responsibility

- Multiplicity of Management Agencies

A STEP BY STEP DEVELOPMENT WILL LEAD TO THE SUCCESS OF ITS

Recommendations

- Member Countries must adhere to the UN Conventions of Road Traffic and Signs and Signals of 1969.

- Traffic Engineering Centers should be established

- Codes of Traffic Control Devices should be Statutory under Law

- Road Traffic Legislation should include all road users and should be enforceable

Recommendations

- To avoid undefined growth, development agencies must stress upon transport led planning

- A coordination System with definition of role and responsibilities of all management agencies should be put in place

Contribution of IRTE in the Decade of Action for Road Safety

- Hosting a special session of the Working Party-I (WP1) of UNECE at

The College of Traffic Management

Aravali Hills, Faridabad, NCR Delhi, India

4,5,6th December 2013

THANK YOU