

Brief Note on TMICC

The Traffic Management and Information Control Centre (TMICC) project has been developed as a part of the GEF-Sustainable Urban Transport Project (GEF-SUTP) undertaken by the Ministry of Urban Development (MoUD), Government of India with support from Global Environment Facility (GEF) and World Bank (WB). The primary objective of GEF-SUTP is to apply National Urban Transport Policy principles to achieve a paradigm shift in India's urban transport system for more favourable sustained developments and alternatives.

The consultancy team led by Delhi Integrated Multi Modal Transit System Limited and supported by Transport Research Laboratory, UK and Kimley Horn Consulting and Engineering India Pvt. Limited hopes that this report will facilitate the city authorities in setting up and managing the TMICC. Contract with the DIMTS has been signed on 8th March 2013.

About TMICC & NUTH

Traffic Management and Information Control Centers (TMICC) is an IT based traffic management system. It is achieved through a network of field devices (traffic signal, cameras, detectors etc.) connected to a centralized facility which is manned by operators who monitor traffic conditions as well as performance of the various traffic systems. The TMICC act as hub or nerve center of the transportation management system and are typically involved with,

- Collection of data on traffic conditions in real-time (speed, volume across various elements of the transportation network - highways, state and local roads);
- Analysis of data and control of traffic management systems (traffic signal systems etc.);
- Monitoring of traffic conditions and incidents;
- Timely interventions to rectify traffic incidents, emergency conditions and/or system failures, and
- Real-time dissemination of information to travelers and other stakeholders (like media, emergency response teams etc.).

National Urban Transport Helpline (NUTH) being planned are expected to disseminate public transport and other travel related information to facilitate travel planning by public. NUTH would be developed for various India cities and would provide public transport information through several channels, namely, a common unified telephone helpline number, website, mobile application and social media.

TMICC Objectives

The main objectives of the TMICC and important activities performed to meet these objectives are as under:

- **Monitoring and management of traffic**

- Management and Monitoring of Traffic Junctions and Roadway Systems
 - Signal Timing and Operations
 - Road Network Surveillance
 - Active Traffic and Demand Management
- Monitoring the functional status of various traffic equipment (field equipment) and taking steps towards restoration of defective equipment, including,
 - Traffic signals
 - Roadway sensors
 - Cameras
 - Variable message signs
- Interfacing with various agencies to obtain information impacting traffic flows
 - Transit Operations
 - Parking Management and Operations
 - Weather Information Monitoring
 - Toll Operations
 - Police Enforcement
 - Safe City Control Centers
- Support traffic management activities related to planned events in coordination and collaboration with other city agencies
- Detecting traffic incidents, emergencies and supporting authorities in responding to these by way for coordination, information sharing and dissemination
- Sharing of traffic data and information with various agencies such as transit, road construction and maintenance, police etc. to help such agencies to monitor and control their respective operations more efficiently
- **Dissemination of Traffic Information to Public**
 - Dissemination of traffic information to public through variable message signboards, web site, helplines, mobile applications, social media etc.
- **Data Repository**
 - Storage of traffic data and sharing the same with planning agencies in order to support transport planning measures in the city.

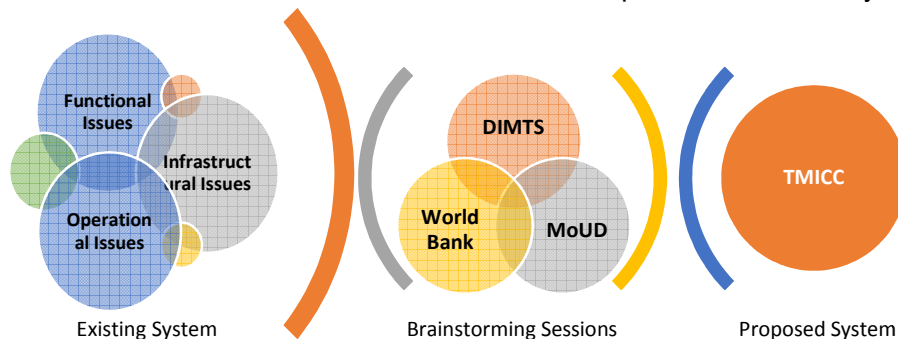
Process followed to conduct the study& Workshop details

We have visited various cities for carrying out requirement study to conceptualise the vision and scope of TMICC at various city level.

Approach of Study is to understand the transport related issues of the cities and held discussion with various stakeholders to resolve the same. We have engaged in multiple

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meetings with officials of World Bank, MoUD and stakeholders of respective cities. The officials have shared their expectations from the TMICC System and issues in the present system, which were captured by us



City level as well as National Level Workshop has been conducted for this project to understand stakeholders vision regarding the same and aware them to the progress. 2 days national level workshop has been held on 20.01.2015 and 21.01.2015 with two field visit on 19.01.2015 and 22.01.2015 respectively on Casuarina Hall, India Habitat Centre, New Delhi. The Agenda of National Level Workshop is to cover TMICC and NUTH operations documents, planning and implementation aspects in order to encourage establishment of these systems in the cities and build capacity of states and UTs in implementing such systems. Overview of TMICC & NUTH, State of the Art Practices, TMICC & NUTH Applications and Concepts, Planning and Design Considerations, Overview Of NUTH, ITS Architecture, Systems Engineering, Institutional Considerations and Organizational Setting for TMICC and NUTH, Project Management, operations and maintenance Approach, performance monitoring and TMICC and NUTH sizing and phasing and costing.

Details of Attendees on is in annexure 1

Status of Deliverables

The following deliverables under the TMICC project has been submitted:-

S.No.	Deliverables	Status	Final Submission Date
1.	Inception Report	Submitted	29/04/2013
2.	State of the Art Report	Submitted	08/08/2013
3.	City Selection/ Workshop Report	Submitted	18/12/2013
4.	Generic Operation Document	Submitted	20/03/2015
5.	City-Specific TMICC and NUTH Operation Documents	Submitted	29/09/2015
6.	Empanelment of up to 25 Consultants	Submitted	16/02/2015
7.	Capacity Building Workshops	Submitted	26/06/2016
8.	Final Operations Documents	Submitted	25/05/2016

The above documents has been prepared under the guidance of Ministry of Urban Development (MoUD), Government of India with the primary objective to assist various


government organizations and public authorities in India embarking on the process of establishing TMICCs


Envisage benefits











The TMICC implementation shall leads to the following benefits to the stakeholders:


- Improvement in overall traffic flow by efficient traffic management thereby improving the efficiency of transportation network
- Improved flow of traffic resulting in savings in time for commuters
- Increased road user satisfaction driven by access to real-time information of traffic
- Reduction in traffic congestion
- Capital expenditure on physical infrastructure build-up to cater to traffic requirements can be avoided or postponed
- Reduction in energy consumption for transportation
- Reduction in pollution and Green House Gas (GHG) emissions
- Improvement in coordination amongst various agencies enabling faster responses to incidents
- Improved planning for traffic management both, for short term measures as well as long term interventions based on data mining and analysis.
- Useful for accident data collection and analysis
- Collected data can be used for framing the traffic policy for the city.


Annexure 1 Attendance details of National Level Workshop conducted at New Delhi



TRAFFIC MANAGEMENT INFORMATION CONTROL CENTRE AND NATIONAL URBAN TRANSPORT HELPLINE
 NATIONAL CAPACITY BUILDING WORKSHOP
 VENUE: INDIA HABITAT CENTRE (CASUARINA HALL)
 DATED: 20.01.2015






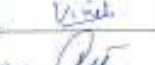
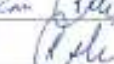






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