Draft-National Intelligent Transport Systems (ITS) Policy Framework for India

NITI Aayog, Government of India

History – Draft National ITS Policy Framework

Statement of Intent (SoI)

- SoI was signed between NITI Aayog and Geneva based International Road Federation (IRF) in Sept 2017

Objective of SoI:

- Creation of a national platform involving relevant stakeholders
- Address issues such as traffic management, parking management, electronic enforcement of traffic rules and regulations, fleet management and monitoring as well as innovation and education in ITS

Milestones – Draft National ITS Policy Framework

July, 2018
- Three meetings of the working group of ITS were held

Sept, 2018
- IRF submitted a National ITS Strategy

Oct, 2018
- IRF submitted a National ITS Policy

Nov, 2018
- IRF submitted an Action Plan for Execution of ITS policy in India

Milestones – Draft National ITS Policy Framework

Feb, 2019
- National and International expert consultations were conducted

July, 2019
- CEO called for a presentation and decided to share the ITS Policy framework with Line Ministries for their comments

July, 2019
- ITS Policy Framework was shared with all relevant stakeholders for their comments (D.O. No. 3/16/2019-Tpt)

Why National ITS Policy Framework?

→ Industry 4.0 era is a modern insurgency that connects people, processes and machines

→ In recent years, Information and Communication Technology (ICT), systems have revolutionized transport systems

→ Traffic problems (e.g. congestions, crashes and environmental pollution) globally have increased the necessity of applying modern technologies in transport systems

Contents

Key features proposed in the ITS Policy Framework
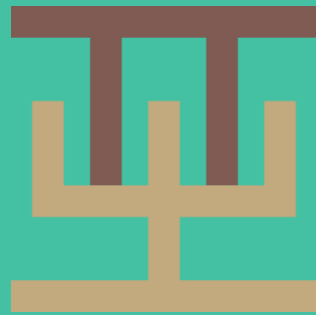
Way Forward

Key Features of Proposed ITS Framework in India

Institutional Framework for ITS

National ITS Architecture

ITS Standardizati on

ITS Security

Transport Policy and Regulations

Capacity Building in ITS

Financing for ITS

Institutional Framework for ITS in India

→Collaborative ecosystem is the need of the hour

→**NITI Aayog will create a task force** for setting up ITS Joint Programme Office (ITS JPO) under MoRTH.

→The taskforce will provide an action plan along with timelines

→**Objective**: Facilitate cooperative ITS adoption across the nation and;

→Coordinate with Ministries and Departments and States for seamless uptake of ITS

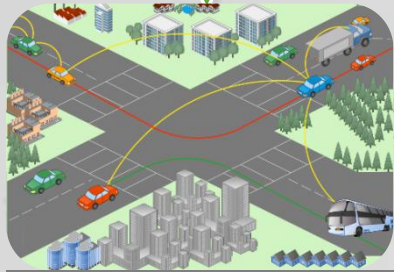# Institutional Framework for ITS in India

ITS JPO will have dual role;

1. Create nine (but not limited) thematic taskforces in different domains of ITS and Mobility Management
2. Create an action agenda based on outcome of the taskforces

Task Force : 1	National ITS Architecture
Task Force : 2	Standardisation for ITS
Task Force : 3	Recommendation for "Common Service Layer"
Task Force: 4	Creation of GIS based National Road Accident Platform
Task Force : 5	Directions for Promoting E- Tolling Nationwide
Task Force: 6	Creation of National ITS Data Repository
Task Force: 7	Radio Frequency Delicensing for Automotive Industry
Task Force: 8	ITS Policy Initiatives –Traffic Management
Task Force: 9	Action Plan for Capacity Building on ITS

National ITS Architecture

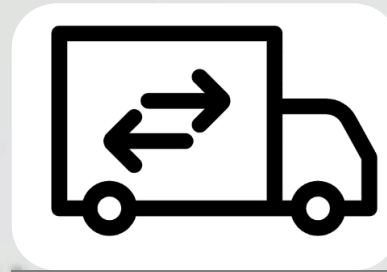Major areas considered under Indian National ITS Architecture:

Travel and Traffic Management

Public Transportation Management

Electronic Payments

Freight Transport

Multi Modal Transport

Emergency Management
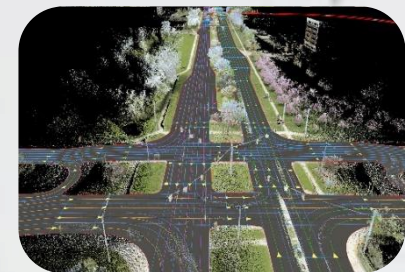
Weather and Environment

Disaster Response Management

Advanced Vehicle Safety Systems

Information Management

Maintenance and Construction Management

It provides a framework for planning, defining, deploying, and integrating ITS.
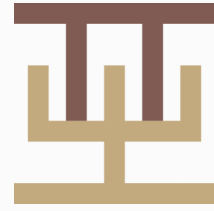
National ITS Architecture

Travel and Traffic Management

- Pre-trip Travel Information
- On-trip Driver Information
- Route Guidance
- Ride Matching and Reservation
- Traveller Services Information
- Traffic Control
- Incident Management
- Travel Demand Management
- Emissions Testing and Mitigation
- Highway Rail Intersection

ITS Standardization

→ Develop ITS standards for uniform product response, universal interface, and data transferability etc.

→ It is basis to provide interoperable and cost-efficient ITS applications to citizens.

→ Open API and open data standardization shall be deployed as per **National Policy on Information Technology, 2012** to build platforms promoting open innovation.

ITS Security

→ DoST - Guidelines on **National Data Sharing and Accessibility Policy (NDSAP)**, 2012 are applicable for ITS in India

→ DoT - **Machine to Machine (M2M) communications** guidelines are relevant for ITS

→ Guidelines of Policy on **Adoption of Open Source Software for Government of India**, MEITY, 2014 are applicable for ITS in India

Transport Policy and Regulations

Vehicle ID options	**Safety and Insurance**
Interoperable Traffic Control Centre	**Radio Frequency Delicensing**

Automation of violation detection

ITS Data Repository

Road Accident Management System

Mobility-as-a-Service (MaaS)

ITS performance is directly linked to transport policies

Transport Policy and Regulations

Vehicle ID options

- Provisions of RFID/FasTag in all automobiles for better traffic and parking management in Tier-I cities.
- Standardization of vehicle number plates across the country

Safety and Insurance

- Link vehicle insurance to vehicle ownership to ensure vehicle ownership databases are up to date
- Safe driving behaviour through latest practices as Black Box insurance

Transport Policy and Regulations

Automation of violation detection

- Camera as well as sensing technologies should be leveraged
- Introducing smart driver license cards- credit-point based system

ITS Data Repository, Aggregator and Archive

- Developing framework to ensure data anonymity and data aggregation
- It will enable mobile, transport operators, taxi services and consumers to share their non-sensitive data for public use.

Transport Policy and Regulations

Interoperable Traffic Control Centre

- For strict supervision and enhance citizen experience interlink control rooms of NHs, SHs

Radio Frequency Delicensing

- It would enable auto manufacturers to introduce globally proven advanced safety technologies

Transport Policy and Regulations

National Road Accident Management System

- Creation of National GIS based road accident platform

Mobility as a Service (MaaS)

- Integration of Transport Services provided by both public and private agencies.
- Develop road maps for building MaaS Platforms in India

18

Capacity Building in ITS

→ **Develop ITS courses,** establish ITS Labs, incubation centres and research hubs.

→ **Encourage collaborations** among academia, industry and global institutions of higher learning.

→ **Develop ITS resources** (journal papers, books etc.) in collaboration with the practitioners.

Financing for ITS

→ **'Scheme for Urban Transport Planning'** should be continued as per guidelines of MoHUA.

→ Smart Cities Mission, AMRUT Mission and Nirbhaya Scheme are already partly contributing to establish certain features of ITS ecosystem.

→ Create sustainable ecosystem by developing ITS projects under Public Private Partnership (PPP) mode

Way Forward

→ **Seeking comments** on Draft National ITS Policy Framework for India from the line Ministries

→ **Compilation** of Comments received

→ Presenting Final Policy Framework to all stakeholders in a **Larger Consultation** meeting

→ **Publish** the National ITS Policy Framework for India

THANK YOU