

## Overview of Automotive Regulations in India

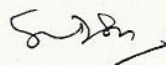
### Motor Vehicles Act and its history

The first enactment of law relating to motor vehicle was the Indian Motor Vehicles Motor Act, 1914. It was subsequently replaced by the Motor Vehicles Act, 1939 and still later by Motor Vehicle Act 1988 (MVA). The technical requirements of construction and maintenance of the vehicle are covered by the MVA. Under this Act, specific mandatory requirements in the form of Rules are framed by the Ministry of Road Transport & Highways (MoRTH) from time to time. These Rules are issued as notification and are titled as Central Motor Vehicle Rules-1989, generally referred to as CMVR.

### Policy and Intensions

Transportation sector plays a major role in the development of the vast and diverse country i.e. India. Government of India has adopted the policy for establishing adequate and safe road infrastructure and safe, environmentally friendly vehicles. For this purpose Government has finalized *Auto Fuel Policy* in the year 2002 and *Automotive Mission Plan* in the year 2006. Auto Fuel Policy provides a road map for future emission norms to be implemented and also prescribes the fuel standards for compliance to the norms. The policy stresses the need for a holistic approach required for managing the emissions from vehicles, emission data inventory, promotion of new technologies, improvement in the fuel quality, and promotion of public transport and management of in-use vehicles in order to develop a comprehensive approach for handling emissions from automobiles.

Standards related to testing and approval of vehicles/ components and subsystems, are prepared by the technical expert committees. India has a policy to align our national standards with ECE regulations to the extent possible. Out of 126 ECE regulations, currently India has considered 98 regulations for technical alignment of our country's standards.



### **Transportation challenges**

India has a large network of roads comprising national highways, state highways and urban/ rural roads. The characteristics and distribution of all road patterns is quite peculiar. Also high density of traffic and mixed pattern of vehicle population in urban areas is another peculiarity.

2 wheelers are very extensively used as a means of personalized transport. Therefore, their population is very high. 3 wheelers are used on a large scale as public transport vehicles. Density of passenger cars has been increasing on urban as well as rural roads. Passenger cars are more often used for meeting family transportation needs rather than for individual use.

India has a vast network of roads, 3.34 million km in length, which spreads across the length and breadth of the country. Out of the total land transport, roads support 65% of freight movement and 85% of passenger traffic. Heavy commercial vehicles are therefore the backbone of mobility requirements. In rural areas Agriculture Tractors, in addition to their field operations, are also used extensively for haulage of goods on the roads.

### **Emission Regulations in India**

*Development of IDC (Indian Driving Cycle)* - Automotive Research Association of India (ARAI) developed an Indian Driving Cycle in the year 1985. The mass emission norms for various categories of vehicles were based on this driving cycle and they were notified under CMVR in 1989.

**Standing Committee on Implementation of Emission Legislation (SCOE)**- Realizing the need for a permanent body to coordinate the emission regulations and their implementation Ministry of Road Transport & Highways (MoRTH) in 1991 appointed this committee with Jt. Secretary MoRTH as chairman to advise the government in the matters related to emission regulations. In May 1991, Ministry of Environment and Forests (MoEF) appointed a committee chaired by Prof. H. B. Mathur for recommending the next stage norms for working out the mass emission norms to be implemented in 1995 and 2000.

In summary emission regulations were implemented in following manner:





- The first mass emission norms for vehicles were enforced from 1<sup>st</sup> April 1991 for Petrol vehicles and from 1<sup>st</sup> April 1992 for Diesel vehicles.
- Based on the recommendations of Mathur committee the next stage norms were implemented from 1<sup>st</sup> April 1996.
- Subsequently, after introduction of Lead Free fuel across the country, the fitment of catalytic converters on passenger cars was mandated with effect from 1<sup>st</sup> April 1998. New mass emission norms were also notified for the passenger cars with catalytic converters with a deterioration factor of 1.2.
- Supreme Court of India in its orders dated 29<sup>th</sup> April 1999 and 13<sup>th</sup> May 1999 directed that in National Capital Region (NCR) all private vehicles need to conform to Euro I norms with effect from 1<sup>st</sup> June 1999 and Euro II norms with effect from 1<sup>st</sup> April 2000. Accordingly, MoRTH notified these norms. During this period based on intervention by various courts, several initiatives were taken for mandatory conversion of commercial vehicles (new as well as retrofitted vehicles) to CNG.
- Further, Bharat Stage II norms were notified for NCT for commercial vehicles with effect from 24<sup>th</sup> October 2001. Also the BS II norms effective in NCR were also extended to other metro cities vide series of notifications during 2001 to 2003.
- Based on the Auto Fuel Policy, the Bharat Stage III norms (equivalent to Euro III) were notified for implementation from 1<sup>st</sup> April 2005 in 11 metros. At the same time, Bharat Stage II norms (equivalent to Euro II) were implemented in the rest of India. Also, Bharat Stage II norms for 2/3 wheelers were implemented across to the country with effect from 1<sup>st</sup> April 2005.
- Further, in the year 2010, Bharat Stage IV norms (equivalent to Euro IV) were implemented for 4 wheeled vehicles in 13 major cities from 1<sup>st</sup> April 2010 and Bharat Stage III norms (equivalent to Euro III) in rest of India from 1<sup>st</sup> October 2010. Simultaneously, for 2 and 3 wheeled vehicles Bharat Stage III norms were notified across the country from 1<sup>st</sup> October 2010.



### **Safety Regulations in India**

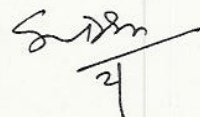
*CMVR- Technical Standing Committee (CMVR-TSC)*, permanent Technical Standing Committee was constituted by government in year 1997. This Committee advises MoRTH on various technical aspects related to CMVR. This Committee has representatives from various organizations viz. Ministry of Heavy Industries & Public Enterprises (MoHI&PE), Testing Agencies, Vehicle and Component Manufacturers' Associations, Bureau of Indian Standards (BIS), State Transport Authorities etc. The Committee has played a major role in development of the Safety Regulations for vehicles and auto components in India. The Committee is chaired by Joint Secretary (Transport), Ministry of Road Transport & Highways, Government of India.

*Automotive Industry Standards Committee (AISC)* – CMVR-TSC is assisted in preparing the technical standards related to Safety by the Automotive Industry Standards Committee (AISC). The Committee is chaired by Director, ARAI and it publishes AIS standards. Till date AISC has published over 112 AIS standards.

### **Bureau of Indian Standards**

The Bureau of Indian Standards (BIS) as the National Standards Body of India has been successfully promoting and nurturing the standardization movement in the country since 1947. Amongst the umbrella of varied activities, formulation of Indian Standards (IS) for various disciplines such as Transport Engineering, Mechanical Engineering Electro-technical, Food and Agriculture etc. is major function of BIS. These activities are carried out in Sectional Committees working under respective Division Councils. Sectional Committee consists of members from organizations viz. Research & Development, Testing Agencies, Regulatory Authority, Manufactures, Consumers/Users, Non-Government Organizations etc. Formulation of Indian Standards on automotive systems and components meet need of the industry and consumer continuously.

The standards, which are related to automotive sector, are dealt by Transport Division Council of BIS.

  
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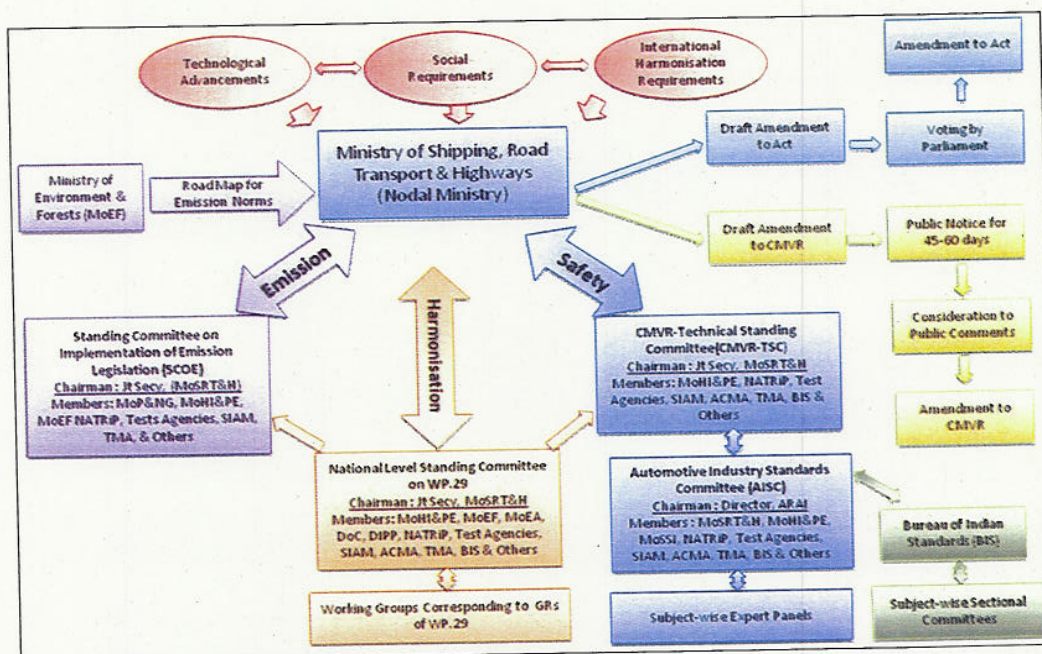


Safety Standards (AIS) that are formulated under AISC, as stated earlier, are adopted by BIS as per their approval procedure.

**National Level Standing Committee on Harmonization of Regulation under WP.29**— Recognising the importance of harmonisation of regulations at international level, in October 2002, Union cabinet approved India’s joining of UN ECE WP.29 as an observer country. Also, Government constituted a National Level Standing Committee under the Chairmanship of Joint Secretary, MoRTH. The Secretarial service is provided by Automotive Research Association of India (ARAI). Various stakeholders such as concerned ministries, test agencies and industry are members of the standing committee. India joined 1998 Agreement with effect from April 2006.

### Overview of Current Regulatory Structure in India

As outlined above, the Regulatory Structure for Automotive Sector in India has emerged over the decades. The procedure intended to be followed for defining the regulations for the Automotive Sector is depicted in the figure below –

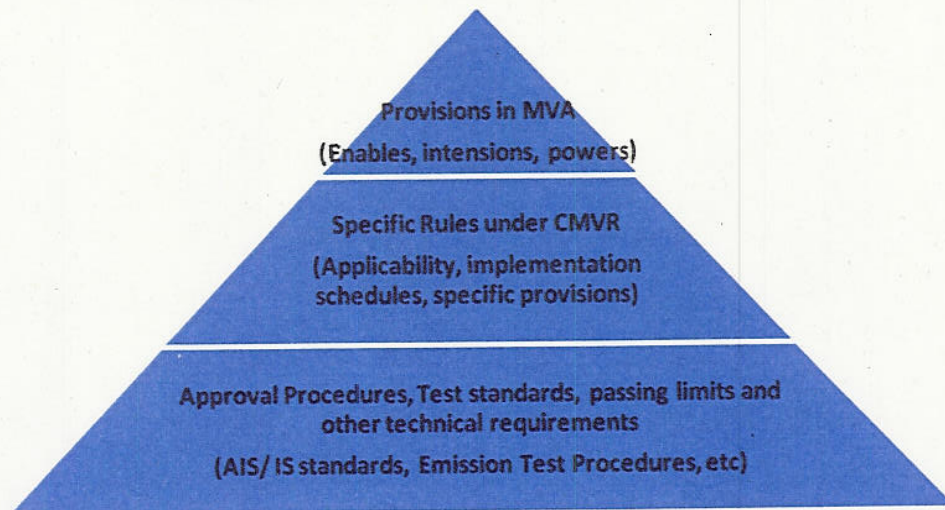


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### **Legal Procedure for notifying new standard**

Technical requirements and test procedures are established in the form of a new standard by the technical committees. The concerned ministry issues draft notification, inviting comments from the stakeholders. After the mandatory period is over, the ministry takes the final review and issues notification under Motor Vehicle Act.

Hierarchy of Act, Laws and standards is as indicated in the figure below:



### **Enforcement of Law**

Ministry of Road Transport & Highways is the nodal agency for enforcement of the Motor Vehicle Act and CMVR. Registration of vehicles is under the purview of State Ministries.

### **Certification System**

India has adopted 3<sup>rd</sup> party type approval system similar to ECE. Under CMVR, Government has authorized various test agencies to carry out testing and grant approvals on behalf of Government of India. Vehicle manufacturer is responsible to ensure compliance to safety, emission and other requirements as notified under CMVR from time to time.

Type approval certificate is mandatory for any new model, approval for any engineering changes in running models or for compliance to any newly notified requirement. For this



purpose, vehicle manufacturer submits technical documentation and prototype vehicle to the test agency, which is authorized to grant type approval.

Continued compliance to the mandatory requirements (Conformity of Production) is verified by carrying out testing/ verification of the randomly selected vehicle/ engine (as the case may be).

### **Exchange of Reports**

India is not a signatory of 1958 agreement.

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