

3.5 TRAFFIC CONTROL DEVICES

The various aids and devices used to control, regulate and guide traffic may be called traffic control devices. The general requirements of traffic control devices are: attention, meaning, time for response and respect of road users. The most common among these are:

Traffic Control Devices

- 1) Signs
- 2) Markings
- 3) Signals and
- 4) Islands.

In addition, road lights are useful in guiding traffic during night.

Traffic signs have been divided into three categories according to Indian motor vehicles act. 1)

Regulatory signs

- i) Prohibitory signs
- ii) Mandatory signs
- 2) Warning or danger signs
- 3) Informatory signs.
- i) Indication signs
- ii) Advance direction signs
- iii) Place and route identification signs.

1. Regulatory signs

Regulatory or mandatory signs are meant to inform the road users of certain laws, regulations and prohibitions. The violation of these signs is a legal offence. Regulatory signs are further sub-divided into two types:

i) Prohibitory signs

These signs are part of the regulatory signs, which are intended to inform the highway users of traffic laws or regulation.

They may be of the following types:

- a) Movement prohibition (such as prohibition of right turns, prohibition of overtaking,

prohibition of entry, one-way streets, exclusion of certain types of vehicles)

- b) Waiting restriction signs,
- c) Speed limit and vehicle control signs
- d) No parking and no stopping signs.
- e) Compulsory direction signs

Prohibitory signs are meant to prohibit certain traffic movements, use of horns or entry of certain vehicles class. These signs are circular traffic movement signs, use of horns or entry of certain vehicles class.

According to the I.R.C. standards, the prohibitory signs are circular in shape and white in color with a red border and a diameter of 600mm. The common prohibitory signs are, straight prohibited, no entry, one-way prohibited, bullock cart and hand cart prohibited, Tonga prohibited, hand cart prohibited, cycle prohibited, pedestrian prohibited, right/ left turn prohibited, U-turn prohibited, overtaking prohibited and horn prohibited.



No parking sign is meant to prohibit parking of vehicles at that place, the definition plate may indicate the parking restriction with respect to days, distance etc. The No Parking sign is circular in shape with a blue-black ground, a red border and an oblique red bar at an angle of 45 degrees.

No stopping/standing sign is meant to prohibit stopping of vehicles at the place; the scope of the prohibition may be indicated on a definition plate. The No stopping/standing sign is circular in shape with blue black ground, red border and two oblique red bars at 45 degree and right angle to each other.



Speed limit signs are meant to restrict the speed of all or certain classes of vehicles on a particular stretch of a road. These signs are circular in shape and have white back ground, red border and black numerals indicating the speed limit.



Fig.6 speed limit

Restricted ends sign indicates the point at which all prohibitions notified by prohibitory signs for moving vehicles cease to apply. Compulsory Direction Control signs indicate by arrows, the appropriate directions in which the vehicles are obliged to proceed, or the only directions in which they are permitted to proceed.

Some of the compulsory direction controls are compulsory turn left, ahead only, ahead or turn left/right and keep left. Other compulsory signs are compulsory cycle track and compulsory sound horn; these are indicated by white symbols instead of white direction arrows of compulsory direction signs.



ii) Mandatory signs

Mandatory signs are part of regulatory signs and are intended to convey definite positive instructions when it is desired that motorists take some positive actions. The two most important mandatory signs are the (i) STOP sign and (ii) GIVE WAY sign.



Fig.7 Stop sign

fig.8 Giveway sign

Fig.7 Stop sign fig.8 Give way sign

The stop sign requires all vehicles to come to a halt before before stop line. According to I.R.C stop sign is octagonal in shape and red in color with a white border, the side of the octagon being 900mm for the standard sized sign.

It is generally used at an intersection where the following conditions exit:

- (i) Street entering a through highway or street
- (ii) Unsignalized intersection in a signalized area. The stop sign should not be used
- (i) On the through expressways
- (ii) For speed control
- (iii) At signalized intersections

The GIVE WAY sign is used to control the vehicles on a road so as to assign right of way to traffic on other roadways. According to the I.R.C the shape of GIVE WAY sign is downward pointing equilateral triangle having a red border band with white back round. It is used under the following conditions:

- (i) On a minor road at a entrance to an intersection where it is necessary to assign right of way to the major road.
- (ii) On the entrance ramp to an express way when acceleration lane is not provided. The GIVEWAY or YIELD sign should not be used:
- (i) On the expressways
- (ii) To control the major flow of traffic at an intersection
- (iii) On the approach more than one of the intersection streets

Warning signs:

Warning or cautionary signs are used to warn the road users of certain hazardous conditions that exist on or adjacent to the roadway. The warning signs are in the shape of equilateral triangle with its apex pointing upwards. According to I.R.C warning signs are white back ground, red border and black symbols. The side of triangle is 900mm.

The commonly used warning signs are, right hand/left hand curve, right/left hair pin bend, right /left reverse bend, steep ascent/descent, narrow bridge/road ahead, gap in median, slippery, cycle crossing, pedestrian crossing, school zone, men at work, ferry, cross road, side road, T-intersection, Y- intersection, major road ahead, roundabout, dangerous dip, hump or rough road, barrier ahead, unguarded railway crossing, graduated railway crossing and falling rock.



Fig.2 Warning signs

Informatory signs:

These signs are used to guide the road users along routes, inform them of destination and distance and provide with information to make travel easier, safe and pleasant. The information signs are

- Direction and Place Identification signs
- Facility Information Signs
- Other Useful Information signs
- Parking signs
- Flood Gauge

The direction and Place Identification signs are rectangular with white background, black border and black arrows and letters. The signs of this group include Destination signs, Direction signs, Re-assurance signs, Route Marker and Place Identification signs.

The facility Information signs are rectangular with blue background and white/black letters/symbols. Some of these signs indicate Public Telephone, Petrol Pump, Hospital, First Aid Post, Eating Place and Resting Place. Other useful information signs include No through Road, No Through Side Road, etc.

