AUTOMOTIVE INDUSTRY STANDARD

Procedure for Type Approval of Special Purpose Vehicles (SPV's) for Compliance to Central Motor Vehicles Rules

PRINTED BY
THE AUTOMOTIVE RESEARCH ASSOCIATION OF INDIA
P.B. NO. 832, PUNE 411 004

ON BEHALF OF
AUTOMOTIVE INDUSTRY STANDARDS COMMITTEE

UNDER
CENTRAL MOTOR VEHICLE RULES – TECHNICAL STANDING COMMITTEE

SET-UP BY
MINISTRY OF ROAD TRANSPORT and HIGHWAYS
(DEPARTMENT OF ROAD TRANSPORT and HIGHWAYS)
GOVERNMENT OF INDIA

February 2021

INTRODUCTION

The Government of India felt the need for a permanent agency to expedite the publication of standards and development of test facilities in parallel when the work on the preparation of the standards is going on, as the development of improved safety critical parts can be undertaken only after the publication of the standard and commissioning of test facilities. To this end, the erstwhile Ministry of Surface Transport (MOST) has constituted a permanent Automotive Industry Standards Committee (AISC) vide order No. RT-11028/11/97-MVL dated September 15, 1997. The standards prepared by AISC will be approved by the permanent CMVR Technical Standing Committee (CMVR-TSC). After approval, the Automotive Research Association of India, (ARAI), Pune, being the Secretariat of the AIS Committee, will publish this standard. For better dissemination of this information ARAI may publish this document on their Website.

Based on the discussion in the 56th CMVR-TSC held on 19th June, 2019 Committee agreed in principle to formulate an Automotive Industry Standard (AIS) for type approval procedure for special purpose vehicle as defined in this standard. Such vehicles with specific applications are being introduced such as cash vans, mobile canteen etc. These vehicles may be made by doing alterations / retro fitment in the originally certified and registered motor vehicle to cater to the needs of the specific application. The need for such vehicles is identified and it is noticed that such vehicles face registration issues.

In order to facilitate alteration, retro-fitment, adaptation of the existing registered motor vehicles and endorsement in the registration book as well as to facilitate the registration of newly built special type of motor vehicles there is a need to create appropriate standard. Accordingly, it is proposed to formulate a standard in such a manner that it shall address the issues of the conversion of the existing registered motor vehicles in application specific vehicle as well as newly built application specific motor vehicles. It is envisaged that it will be complex and tedious task to create standard for each application considering the large number of variety of applications. It is also pertinent that there are many applications where in safety requirement are not violated while converting the vehicles in to special purpose vehicles as well as there are no add on safety requirement emerging due to application requirement therefore generic requirement like dimensions, seating arrangement, equipment mounting, retention and holding of cargo, wiring etc along with the compliance with the safety provisions which are already type approved for the registered vehicles. Secondly there are many applications like radioactive material transport, fire tender, cash van, mobile eatery etc, in which there is need to address the safety requirements over and above the safety requirement applicable to basic category of such vehicle as per the CMVR. Accordingly, standard is proposed in two parts as given below.

Part 1: General requirements to be met by all Special Purpose Vehicles as defined in standard.
Part 2: Specific Requirements to be met by Special purpose vehicles depending on their function

The AISC panel and the Automotive Industry Standards Committee (AISC) responsible for preparation of this standard are given in Annex-A and Annex-B respectively.

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Procedure for Type Approval of Special Purpose Vehicles as defined in this standard for compliance to Central Motor Vehicles Rules

PART 1

General requirements to be met by all Special Purpose Vehicles as defined in this standard

0.0 SCOPE

This standard lays down the type approval requirements applicable to special purpose vehicles of category L, M and N.

This standard is applicable to:

a) Special purpose vehicles manufactured by OEM.

b) Special purpose vehicles which are built by body builder on type approved Drive Away Chassis.

This standard is divided in two parts:

Part 1: General requirements to be met by all Special Purpose Vehicles.

Part 2: Specific Requirements to be met by Special Purpose Vehicles depending on their function.

The special purpose vehicles as defined in this standard shall necessarily meet the requirements specified in Part 1 of this standard. Additionally, the vehicles shall meet the requirements specified in Part 2 of this standard for those special purpose duty application for which the vehicle is intended to perform.

1.0 DEFINITIONS

For the purpose of this standard following definitions shall apply:

1.1 **'Special purpose vehicle (SPV)',** for the purpose of this standard, means a vehicle of category L, M or N having specific technical features in order to perform a function which requires special arrangements and / or equipment.

1.2 **'Motor vehicle or vehicle'** as defined in IS 14272:2011, as amended from time to time.

1.3 **'Base vehicle'** means any vehicle which is used at the initial stage of a subsequent type-approval process.

1.4 **'Complete vehicle'** means any vehicle which need not be completed in order to meet the relevant technical requirements of this standard.

1.5 **'Incomplete vehicle'** means any vehicle which undergoes at least one further stage of completion in order to meet the relevant technical requirements of this standard.

1.6 **'Completed vehicle'** means a vehicle, resulting from the process of successive type-approval, which meets the relevant technical requirements of this standard.

1.7 **'Special purpose body builder'** means a firm engaged in manufacturing of special purpose body on chassis of vehicle.

1.8 **'Special purpose body'** means the portion of a vehicle which is modified / altered / adapted to perform a function, which requires special arrangements.

1.9 **'Designated seat'** means the seat provided in the vehicle for normal use, when the vehicle is travelling on the road.

1.10 **'Window'** means an aperture in the sides of the special purpose vehicle to let in light and air. The window need not necessarily be glazed.

1.11 **'Emergency window'** means a window, intended for use as an exit by passengers in an emergency only.

1.12 **'Door'** means a sub system of a special purpose body that permits boarding and alighting of passengers/goods. Door may or may not be with panel (hinged /sliding) for closing it.

2.0 TYPE APPROVAL REQUIREMENTS

Special Purpose Vehicles shall comply with the generic provisions specified under 2.1 and 2.2 of this standard.

2.1 CMVR REQUIREMENTS FOR SPECIAL PURPOSE VEHICLES DEFINED IN THIS STANDARD

2.1.1 Special purpose vehicles defined in this standard shall comply with the requirements of CMVR, as amended from time to time as given in Table 1.

2.1.1.1 Notwithstanding the requirements listed in this standard all special purpose vehicles shall meet the CMVR requirements as notified till the date of type approval granted. Further exemptions, if any, will be as specified in respective Chapters of Part 2 of this standard.

2.1.1.2 For granting Type Approval certificate to body builder manufacturing the special purpose vehicle on a type approved drive away chassis guidelines as specified in Table 1 shall be followed.

2.1.1.3 Body building to be done specific to use of special purpose vehicle shall be carried out in accordance with sound engineering practices and in compliance with Motor Vehicles Act, 1988 and Central Motor Vehicles Rule, 1989, as amended from time to time.

2.1.1.4 Alterations or modifications shall not be done to the already type approved vehicle systems and components such as chassis, suspensions, brakes, fuel system, engine etc. which would affect the safety and emissions, while building special purpose vehicle.

2.2.1.5 Special Purpose Vehicle builder shall submit the compliance document for the requirements specified in this standard for the Special Purpose Vehicle converted from existing registered vehicle or newly built vehicle as per the provisions made in applicable rules in the CMVR for the registration/endorsement of such motor vehicles.

2.2 General Requirements

2.2.1 Electrical wiring

2.2.1.1 All electrical wiring in special purpose vehicle shall be properly installed, taped, clipped or contained in a loom along its length.

2.2.1.2 Electrical wiring shall conform to IS: 2465-1984 as amended from time to time.

2.2.1.3 Electrical installations shall comply with those clauses of IEC 60364-7-708 which are applicable to any type of Special Purpose Vehicle.

Note: The reference to IS 2465:1984/IEC 60364-7-708 does not apply to the original electrical equipment/Wiring Harness, which is already covered by the type approval of the base vehicle.

2.2.2 Battery and alternator

2.2.2.1 Batteries shall be positioned to allow maintenance without removing the battery from its securing device. The construction of the battery and all connections to it shall be such as to prevent any possibility of an inadvertent short circuit.

2.2.2.2 Electrical load if any added while converting or body building of special purpose vehicle should not exceed the rated load available from alternator/battery such electrical tapping shall be used for light loads like illuminations and gadget. In case if higher load is necessary to drive the equipment, same shall be arranged separately. Such special purpose vehicle manufacturer/builder shall demonstrate with well documented evidence that the electrical power tapped if any does not cross the power supply rating battery/alternator.

2.2.3 Partition wall

2.2.3.1 All special purpose vehicles shall have a full partition wall or a partition wall with a door or a window to separate the driver’s compartment from the carrier / rear compartment. Where a door is fitted, it shall be secured against opening when vehicle is in motion.

Provided that in case of special purpose vehicle which provides two rows of seating, i.e., one seating row behind the driver, the partition wall shall be located behind the second row of passenger compartment to separate the carrier / rear compartment.

2.2.3.2 One or two windows with a minimum separation of 100 mm shall be provided in the partition wall.

2.2.3.3 The windows shall allow direct visual contact with the driver.

2.2.3.4 The opening area of the window shall have a maximum area of 0.12 m^2.

2.2.3.5 In case if certain type of special purpose vehicle there is no necessity of partition of wall as there is no issue of safety and security, exemption can have allowed after vetting the documented justification.

2.2.4 Seating of Passengers while vehicle is in motion shall be only on the designated seats. Portion of body which is used to perform special purpose function shall not be used during travel mode of Special Purpose Vehicle.

2.2.5 There shall be dedicated and adequate Storage Compartment in the vehicle if it is required to perform defined special function.

2.2.6 All the working equipments, instruments required to perform defined special function by vehicle shall be secured on fix surface.

3.0 SPECIAL PURPOSE VEHICLE IDENTIFICATION PLATE

3.1 Information to be given in the Special Purpose Vehicle Identification Plate. Please refer figure 1 of this part for illustrative example of identification plate.

3.1.1 Name of the special purpose vehicle Manufacturer / Builder & Address :

3.1.2 Name of the basic model :

3.1.3 Month and year of production of base vehicle

3.1.4 Month and year of production of completed special purpose vehicle

3.1.5 Type of special purpose vehicle (for example Cash Van / Mobile Canteen)

Note: All alphabets / numbers on the vehicle identification number plate shall be minimum 7 mm in height.

Below plate to be permanently fixed at easily accessible location on the special purpose vehicle. In case of any wrong punching, the procedure for making the correction as indicated in AIS-065 shall be followed.

Figure 1
Illustrative example of special purpose vehicle identification plate

NAME OF THE SPECIAL PURPOSE VEHICLE MANUFACTURER / BUILDER	
ADDRESS OF MANUFACTURER/ BUILDER	**NAME OF THE BASIC MODEL**
MONTH AND YEAR OF PRODUCTION OF BASE VEHICLE	
MONTH AND YEAR OF PRODUCTION OF COMPLETED SPECIAL PURPOSE VEHICLE	

3.2 Location of Special Purpose Vehicle Identification Plate

3.2.1 The place of fixing the Special Purpose Vehicle Identification Plate to be fixed at an easily accessible location. The location needs to be specified by the special purpose vehicle Manufacturer / Builder.

4.0 EXTENSION OF TYPE APPROVAL

4.1 Every modification to the type approved special purpose vehicle shall be intimated by the special purpose vehicle manufacturer to the Testing Agency.

4.2. On review of the modifications carried out the Test Agency shall grant the extension of type approval or conduct additional tests as required for granting extension of type approval.

Note: In case of additional tests required only those parameters need to be tested which are modified.

5.0 GUIDELINES FOR REGISTRATION OF SPECIAL PURPOSE VEHICLES

5.1 Permission for alteration/retro fitment/adaptation and endorsement in registration book for existing registered motor vehicles as well as registration of newly built special purpose vehicles shall be as stipulated in applicable provisions of Central Motor Vehicle Rules.

6.0 TECHNICAL INFORMATION TO BE SUBMITTED

6.1 Information to be submitted by OE shall be as per the following:

6.1.1 For L category of vehicle: Table 1, Table 1C, Table 1D, Table 7, Table 11, Table 13, Table 20, Table 21 of AIS-007 (Rev.5) as amended from time to time, as applicable

6.1.2 For M category of vehicle: Table 2, Table 3, Table 4, Table 5, Table 6, Table 7, Table 11, Table 13, Table 20, Table 21, Table 23 of AIS-007 (Rev.5) as amended from time to time, as applicable

6.1.3 For N category of vehicle: Table 2, Table 3, Table 4, Table 5, Table 6, Table 7, Table 11, Table 13, Table 20, Table 21, Table 23, Table 27 of AIS-007 (Rev.5) as amended from time to time, as applicable

6.2 Additional information to be submitted by OE and Information to be submitted by body builder shall be as per the respective Chapters of Part 2 of this standard.

Table 1

CMVR requirements for Type Approval of Special Purpose Vehicles

Sr. No	Subject	CMV Rule	Applicable standard, as amended from time to time.	Category of Vehicles										Guidelines for Test Applicability incase the special purpose vehicle is built by body builder on type approved drive away chassis or in case of extension of type approval or in case of conversion of the existing registered vehicle in to special purpose vehicle
				L1	L2	L5	L7	M1	M2	M3	N1	N2	N3	
1	Axle loading	--	The permissible load on axle of Special Purpose Vehicles shall comply provisions laid down in Central Motor Vehicle Rules, 1989	x	x	x	x	✓	✓	✓	✓	✓	✓	
2	Registration marks	50	ISO 7591	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	NA
3	Overall dimension	93	---	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	As per CMVR. Change in dimension.

4	Size and ply rating of Tyres	95	IS: 15627-2005 IS: 15633-2005 or IS: 15636-2005 AIS 050-2004 AIS 051-2004 and AIS 110-2009	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Change in tyre size, speed rating, load index.
5	Brakes	96	IS: 14664-2010 IS:11852 (Part 1 to 8): 2001 & IS:11852 (Part 9):2003 IS:15986-2015 or AIS:151-20118 IS:11852-2013 AIS:133-2016 AIS:152-2018	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Change in GVW, F/R ratio, tyre size, gear ratio and final drive ratio, wheel base.
6	Steering gears:	98	IS: 12222-2011	**x**	**x**	✓	✓	✓	✓	✓	✓	✓	✓	Change in tyre size, front axle weight, GVW, track width, steering geometry.
	Turning circle diameter		IS: 11948-1999 IS: 11948-2010	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Change in overall length, width, front overhang, track width, steering geometry.
	Steering efforts			**x**	**x**	✓	✓	✓	✓	✓	✓	✓	✓	Change in tyre size, front axle weight, GVW, track width, steering geometry.
7	Forward and backward motion	99	---	**x**	**x**	✓	✓	✓	✓	✓	✓	✓	✓	NA

8	Safety glass	100	IS: 2553-Part 2-1992.	**x**	**x**	✓	✓	✓	✓	✓	✓	✓	✓	Change in safety glass at component and installation level, front windshield, side glass and rear glass at component level, wind shield installation angle.
9	Windscreen wiper	101	IS:15804:2008 IS:15802:2008 AIS:045-2004	x	**x**	✓	✓	✓	✓	✓	✓	✓	✓	Change in windscreen wiper at component and installation level, wiper blade dimension, H point, wiper blade installation.
10	Signaling devices, direction indicators and stop lamps	102	----	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Test is only physical verification in case of change in signaling device at component and installation level.
11	Position of the direction indicator	103	----	✓	✓	✔	✔	✔	✔	✔	✔	✔	✔	Test is only physical verification in case of change in position of direction indicator at component and installation level.
12	Retro-reflectors	104	AIS:090-2005	✔	✔	✔		✔	✔	✔	✔	✔	✔	Test is only physical verification. in case of change in retro-reflector and tape respect to size and location
	Retro-reflective Markings (tapes)	104	AIS:057 (Rev.1)	**x**	**x**	**x**	**x**	**x**	**x**	**x**	✔	✔	✔	Test is only physical verification. in case of change in retro-reflector and tape respect to size and location
13	Lamps	105	---	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	Test is only physical verification.

14	Deflection of light	106	---	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	Test is only physical verification.
15	Use of red, white or blue light	108	---	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	Test is only physical verification.
16	Parking light	109	---	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	Test is only physical verification.
17	Prohibition of spot lights, etc	111	---	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	Test is only physical verification.
18	Exhaust gases	112	---	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	Change in fuel injection equipment, change in overall gear ratio. Change in intake and exhaust system.
19	Location of exhaust pipes	113	---	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	Test is only physical verification
20	Emission	115	---	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	Change in fuel injection equipment, intake and exhaust system.
	Engine power			✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	
	Diesel smoke			**x**	**x**	✔	✔	✔	✔	✔	✔	✔	✔	
21	Speedometer	117	IS: 11827 : 2008	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	Change in tyre size, speed ratio, speedometer installation.
22	Horn	119	IS 1884:1993 and IS:15796: 2008	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	Change in horn at component and installation level.

23	Silencers (Noise emitted by moving vehicles)	120	IS 3028:1998	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	Test is only physical verification in case of change in exhaust system routing
24	Painting of motor vehicles	121	---.	✔	✔	✔	✔	**x**	**x**	**x**	**x**	**x**	**x**	Test is only physical verification
25	Vehicle Identification Number	122	AIS-065:2005	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	NA
26	Automotive lamps	124 (1) (1)	AIS-034 (Part 1)(Rev.1)	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	Change in lamp (bulb)at component and installation level
27	Hydraulic brake hose	124 (1) (2)	IS 7079:2008	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	Change in brake hose.
28	Hydraulic brake fluid	124 (1) (3)	IS 8654:1986	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	change in brake fluid
29	Steering impact	124 (1) (5)	IS 11939:1996 or AIS-096	**x**	**x**	**x**	**x**	✔	**x**	**x**	**x**	**x**	**x**	GVW is less than 1500 kg, change in steering wheel
30	Side door impact	124(1) (6)	IS 12009:1995 or AIS-099	**x**	**x**	**x**	✔	✔	**x**	**x**	**x**	**x**	**x**	**NA**

31	Fuel Tanks : Non plastic fuel tanks	124 (1) (7)	AIS-095 or	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	Change in fuel tank (including fuel tank cap) at component and installation level.
	Plastic fuel tank		IS 15547:2005	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	Change in fuel tank (including fuel tank cap) at component and installation level.
32	Wheel rim	124 (1) (8)	IS 9436:1980 and IS 9438:1980	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	Change in size, material and designation.
33	Exterior projection	124 (1) (11)	IS 13942:1994	**x**	**x**	✔	✔	✔	✔	✔	✔	✔	✔	Change and addition in external protruding parts
34	Bus window retention	124 (1) (12)	IS 13944:1994	**x**	**x**	**x**	**x**	**x**	✔	✔	**x**	**x**	**x**	**NA**
35	Wheel guards	124 (1) (13)	IS 13944:1994	**x**	**x**	**x**	**x**	✔	**x**	**x**	**x**	**x**	**x**	Change in wheel guard, tyre sizes
36	Wheel nuts , wheel discs & hub caps	124 (1) (14)	IS 13941:1994	**x**	**x**	**x**	✔	✔	✔	✔	✔	✔	✔	Change in wheel nut, disc and hub cap
37	Accelerator control system	124 (1) (15)	IS 14283:1995	**x**	**x**	**x**	✔	✔	**x**	**x**	**x**	**x**	**x**	Change in control pedals, H point.
38	Door locks and retention components	124 (1) (16)	IS 14225:1995	**x**	**x**	**x**	✔	✔	✔	✔	✔	✔	✔	Change in door lock and its child parts

39	Hood latch system	124 (1) (17)	IS 14226:1995	**x**	**x**	**x**	✔	✔	**x**	**x**	✔	✔	✔	Change in hood latch, locking arrangements.
40	Identification of controls, indicators and tell-tales	124 (1) (18)	AIS-071 (Part 1 & 2)-2009 AIS 126 (only for 2W)	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	Change or addition in control.
41	Installation and performance of lighting and light signaling devices	124 (1) (20)	AIS-008 (Rev.1):2010 and AIS-012 (Rev.1) and AIS:010(Rev.1)	**x**	**x**	**x**	✔	✔	✔	✔	✔	✔	✔	Change in geometric visibility and installation.
42	Electromagnetic Compatibility	124 (1) (21)	AIS-004 Part 3 - 2009	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	Change or addition of active electronics parts which may create confusion to driver or pedestrian.
43	Gradeability	124 (1) (23)	AIS-003:1999	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	Change in overall gear ratio, change in tyre size and wheel base.
44	Spray Suppression devices for automotive vehicles	124(1)(33)	AIS:013(Rev.1)	**x**	**x**	**x**	**x**	**x**	**x**	**x**	✔	✔	✔	
45	Field of vision	124 (1) (34)	AIS-021:2004	**x**	**x**	**x**	**x**	✔	**x**	**x**	**x**	**x**	**x**	Change in H point, addition of device in driver forward vision.

46	Survival space for the protection of occupants in the cab of vehicle	124(1)(35)	AIS:029:2004	**x**	**x**	**x**	✔	**x**	**x**	**x**	✔	✔	✔	
47	The strength of superstructure of passenger vehicles	124(1) (36)	AIS-031:2004	**x**	**x**	**x**	**x**	**x**	✔	✔	**x**	**x**	**x**	Change in related to vehicle structure
48	Flammability	124 (1) (37)	IS:15061: 2002	**x**	**x**	**x**	**x**	**x**	✔	✔	**x**	**x**	**x**	**NA**
49	Interior fittings	Rule 124 (1) (38)	IS 15223:2002 or AIS-047:2009	**x**	**x**	**x**	✔	✔	✔	✔	✔	✔	✔	Change in interior, H point.
50	Interior noise	Rule 124 (1) (40)	IS:12832:2010	**x**	**x**	**x**	**x**	**x**	✔	✔	✔	✔	✔	NA
51	Bumper	124 (1) (41)	IS:15901:2010	**x**	**x**	**x**	**x**	✔	**x**	**x**	**x**	**x**	**x**	Change in bumper at component level and its mounting points.
52	Handholds	124 (1) (42)	AIS-046:2005	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	NA For all designated seats in living accommodation two points lap belt shall be provided.

53	The arrangement and mode of operation of foot controls	124 (1) (45)	AIS-035:2006	**x**	**x**	**x**	✔	✔	**x**	**x**	**x**	**x**	**x**	**NA**
54	Defrost and/or demist system	124 (1) (46)	AIS-084 (Part1):2008 and /or AIS-084(Part2):2008	**x**	**x**	**x**	**x**	✔	**x**	**x**	**x**	**x**	**x**	Change in defrost and demist devices, change in volume, addition of seating capacity.
55	Minimum ground clearance for M1 category of vehicles	124(1)(50)	IS:9435:2004	**x**	**x**	**x**	**x**	✔	**x**	**x**	**x**	**x**	**x**	
56	Protection device against unauthorized views	124(1)(51)	AIS:075:2006	**x**	**x**	**X**	✔	✔	✔	✔	✔	✔	✔	
57	Vehicle Alarm System and immobilizer	124(1)(52)	AIS:076:2007	✔	✔	✔	**x**	✔	✔	✔	✔	✔	✔	
58	Adaptive front lighting system	124(1)(53)	AIS:127:2016	**x**	**x**	**x**	**x**	✔	**x**	**x**	**x**	**x**	**x**	
59	Rear under run Protective	124(1-A)	IS 14812:2005	**x**	**x**	**x**	**x**	**x**	✔	✔	**x**	✔	✔	Change in RUPD at component level and its mounting points
	Lateral protection (side guards)		IS 14682:2004	**x**	**x**	**x**	**x**	**x**	✔	✔	**x**	✔	✔	Change in LUPD at component level and its mounting points.

60	Type Approval and Conformity of Production	124 (4)	AIS-037:2004.	**x**	**x**	**x**	**x**	✔	✔	✔	✔	✔	✔	NA
61	Safety-belts assembly	125(1A)	IS 15139:2002	**x**	**x**	**x**	✔	✔	**x**	**x**	**x**	**x**	**x**	Change in seat belt
62	Front under-run protection	125(1B)	AIS:069:2006	**x**	**x**	**x**	**x**	**x**	**x**	**x**	**x**	✔	✔	
63	Fitment of temporary cabin	125(1C)	AIS:070:2004	**x**	**x**	**x**	**x**	**x**	✔	✔	✔	✔	✔	
64	Rear view mirror(specification & installation)	125 (2)	AIS:001(Part 1)(Rev.1):2011 and AIS:002(Part 1)(Rev.1):2011	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔	Change in mirror at component level and its mounting points.
65	Seats, Seat anchorages and their head restraints	125(6)(7)	AIS:023:2005	**x**	**x**	**x**	✔	**x**	✔	✔	✔	✔	✔	Change in seat at component level and mounting location.
66	Additional Safety Features	125(9)(10)	AIS:145:2017	**x**	**x**	**x**	**x**	✔	✔	✔	✔	✔	✔	
67	Safety-belt anchorages	125(1A)	IS 15140:2003	**x**	**x**	**x**	✔	✔	**x**	**x**	**x**	**x**	**x**	Change in seat at component level and mounting location.

68	Seats, seat anchorages and Head restraints (For M1)	125(5)	IS 15546-2005	**x**	**x**	**x**	**x**	✔	**x**	**x**	**x**	**x**	**x**	Change in head restraint at component level, head restraint adjustment points.

(NA): Not applicable in case of retype approval of completely built special purpose vehicle.
(✔): CMV Rule is applicable to this category of vehicle
(**x):** CMV Rule is not applicable to this category of vehicle
(*) The requirements specified in CMVR, from time to time, shall prevail over the requirements specified in Table 1 above.

Part 2

Specific Requirements for Special Purpose Vehicles as defined in this standard

1.0 The special purpose vehicles as defined in this standard shall necessarily meet the requirements specified in Part 1 of this standard. Additionally, the vehicles shall meet the requirements specified in Part 2 of this standard for those special purpose duty application for which the vehicle is intended to perform.

2.0 TYPE OF SPECIAL PURPOSE VEHICLE

2.1 Cash Van (AnnexI)

2.2 Mobile Canteen (AnnexII)

ANNEX1

SPECIFIC REQUEIREMENTS FOR CASH VANS

1.0 SCOPE

This chapter specifies constructional and functional requirements for M and N category of Cash Vans.

2.0 DEFINITION

In addition to the definitions available in Part 1 of this standard following definitions shall apply to Cash Vans.

2.1 **"Cash van"** means a vehicle used for the professional transport of cash by road;

2.2 **"Cash handling agency"**, **"Cash replenishment agency" or "Cash in transit agency"** means an agency or entity by whatever name called, engaged in cash transportation activities.

2.3 **"Cash Transportation Activities"** means the physical transfer of cash, such as bank notes, coins, credit card, debit card or other items of value from one location to another, and includes loading cash into, or unloading cash from, an ATM machine.

2.4 **"ATM"** means the automatic teller machine that dispenses cash or performs other banking services when an account holder of any bank inserts a bank card therein.

2.5 **"CASH VAN security staff"** means the employees instructed to drive the Cash van in which the cash is being carried or to protect its contents;

2.6 **"Point-to-point transport"** means transport from one secure location to another, without any intermediate stops;

2.7 **"Daytime"**, when referring to transport, means transport carried out:

between 9.00 and 20.00; for urban areas;

between 9.00 and 17.00; for rural areas;

between 9.00 and 15.00; for in the districts notified by the Central Government as Left Wing Extremism (LWE) affected area.

3.0 SPECIFIC REQUIREMENTS

3.1 Use of Specially Designed and Fabricated Cash Van

All Cash transportation and ATM cash replenishment activities shall only be carried out in secured Cash Vans owned by the licensed private security agency meeting guidelines laid out below.

3.2 Make:

3.2.1 Cash Van shall have power to weight ratio ≥ 5 kW/tone.

3.2.2 In case an already in use registered vehicle is converted to a cash van then it should not be more than seven years old.

3.2.3 Cash Van shall have tubeless tyres

3.2.4 Cash Vans shall have a ground clearance of not less than 150 mm.

3.2.5 Cash Van should accommodate minimum five passengers including driver.

3.3 **Layout**

3.3.1 Cash van, shall have 2 independent compartments.

3.3.2 Compartment for storing cash shall be physically separated and locked from passenger compartment.

3.3.3 Within the passenger compartment the driver compartment shall be separated.

3.3.4 Cash Compartment Security :

3.3.4.1 The cash compartment shall be inaccessible from outside the vehicle unless operated internally through manual/ electronic lock.

3.3.4.2 Cash compartment shall be specially reinforced with steel with only one door and grill gate.

3.3.4.3 The entrance of the cash compartment shall be from the rear side to ensure proper visibility, operation feasibility and CCTV surveillance.

3.3.4.4 All windows and wind screen shall have wire mesh protection of not more than one square inch and each window mesh shall have a circular port-hole of six inches diameter for use of weapons

3.3.4.5 The panic switch for operating the hooter shall be available with driver and other occupants.

3.3.5 Cash Box retention requirement:

3.3.5.1 The cash van manufacturer shall submit the details of the retention system for cash boxes. The cash van manufacturer shall provide adequate number of chains to secure the cash box with retention device. The retention device shall be securely fixed on the floor of the vehicle.

3.3.6 Fire Extinguishers

3.3.6.1 Each compartment shall be provided with one fire extinguisher of 2 kg capacity.

3.3.7 Other Security Features:

3.3.7.1 Every Cash van shall be equipped with CCTV camera with DVR with 30 days' backup footage to track activities of crew / 5 days recording facility and three cameras installed in front, rear and inside the cabin within Cash van.

3.3.7.2 It shall also be equipped with fire extinguishers and emergency lights, first aid box and display of contacts details of ambulance, police to ensure quick reaction in case of an attack.

3.3.7.3 A security alarm with GSM based auto-dialer shall be provided with a motorised siren.

3.4 **Live GPS tracking of Cash van during operations:**

3.4.1 All Cash transportation and ATM cash replenishment activities shall only be carried out in secured Cash Vans fitted with GPS tracking device in accordance with AIS-140, as amended from time to time. GPS installed shall have controlling technology for disabling / immobilizing the Cash Van whenever required remotely.

APPENDIX 1 TO ANNEX1

INFORMATION TO BE SUBMITTED AT THE TIME OF APPROVAL OF CASH VAN

Sr.no	General	Details
1.0	**Manufacturer details**	
1.1	Name and address of the manufacturer	
1.2	Name of variants, if any:	
1.3	Plant/(s) of manufacturer:	
2.0	**Description of vehicle under test**	
2.1	Vehicle category	
2.1	Vehicle model	
2.2	Vehicle type	
2.3	Vehicle manufacturer	
2.4	CMVR certificate no	
2.5	Chassis no	
2.6	Engine no	
2.7	Engine displacement	
2.8	Fuel type	
2.9	Engine Power	
2.10	Dimensions (mm)	
2.11	length	
2.12	width	
2.13	height	
2.14	Ground clearance	
2.15	Wheel base	
2.16	Gross vehicle weight	
2.17	Seating capacity	
3.0	**Cash Compartment**	
3.2	Schematic representation	
3.1	Details of cash box security provisions	
3.2	Details of CCTV provisions	
3.3	Details of GPS, if fitted	
4.0	Details of the alterations done on original vehicle (applicable for retrofitter/ body builder)	

ANNEX2

SPECIFIC REQUIREMENTS FOR MOBILE CANTEEN

1.0 SCOPE

This chapter specifies the specific requirements of M and N Category vehicles used as mobile canteen.

This chapter mainly covers the specific requirements necessary for roadworthiness of such vehicles. Equipment's related details of the cooking facility and the technology used for cooking are not a part of this Chapter.

2.0 DEFINITIONS

In addition to the definitions available in Part 1 of this standard following definitions shall apply to Mobile Canteen.

2.1 **"Mobile canteen"** means a "Special Purpose Vehicle (SPV)" of category M and N vehicles used for selling of cooked food in market places and can also have the necessary cooking facilities installed in the vehicle.

Note: The cooking shall only be allowed when Mobile Canteens are parked in the designated parking areas as specified by the local authorities.

3.0 GENERAL REQUIREMETNS

3.1 Vehicles shall be designed and constructed to protect food from risk of contamination.

3.2 Fittings and equipment for mobile units shall be of good quality materials capable of being readily cleaned. Bare wood shall not be allowed.

3.3 Floors in mobile canteen shall be of smooth, impervious and non-slip material and preferably coved to the wall fixtures.

3.4 Mobile canteen shall be screened at the sides and back to prevent risk of contamination and pests.

3.5 Tent / marquees shall be of cleanable materials or the kitchen / preparation areas should be provided with washable wall linings.

3.6 Waste water from sinks and wash hand basins shall be discharged into foul water system or into suitable containers and not directly onto the ground.

3.7 **Temperature control**

3.7.1 There shall be an arrangement in Mobile Canteen to store products at their prescribed storage temperatures.

3.7.3 Mobile canteen shall have sufficient space for storage of high-risk foods which need refrigeration or the use of commercial cool boxes with eutectic freezer blocks.

3.8 **Cooking Facilities**

3.8.1 Cooking area can be inside or outside the vehicle as per design and layout of Mobile Canteen.

3.8.2 Cooking facility provided inside the vehicle should be secured to the vehicle floor and/or side wall as a permanent feature (bolted, riveted, screwed, or welded).

3.9 **Storage Facilities**

3.9.1 Storage facilities may be provided by a cupboard or locker or by drawer systems.

3.9.2 The facility shall be an integral part of the Mobile Canteen.

3.9.3 The storage facility shall be a permanent feature (bolted, riveted, screwed or welded).

3.9.4 Storage area for cooking vessels and food items to be done separately.

3.10 **Water storage facilities**

3.10.1 Fresh water tank can be provided inside or outside the vehicle in a place/location for easy maintenance.

3.10.2 Separate gray water tank storage to be provided. (Used water from wash basin).

3.10.3 Water pump may be provided for fresh water near cooking area.

3.11 **Electrical Supply**

3.11.1 Cables and flexes must be positioned so as not to cause a tripping hazard.

3.11.2 If generators have to be used, steps should be taken to place them safely, protect from interference and to reduce noise and fume nuisance. The generators so used shall comply with requirements specified by CPCB from time to time.

3.12 **Liquefied Petroleum Gas (LPG)**

3.12.1 Gas appliances shall be fitted and tested by PESO.

3.12.2 LPG cylinders shall be in a fire-resisting lockable compartment (with 1/2-hour fire resistance). Compartments shall have adequate ventilation at high and low levels.

3.12.3 Cylinders shall be fitted with automatic cut-off valves and be protected from tampering.

3.12.4 All cylinders shall be kept away from heat and ignition sources.

3.12.5. All pipes and fittings shall be as short as possible with appropriate crimp or compression fittings (not slip-on fittings).

3.12.6 All pipes shall be protected from abrasion or mechanical damage (armored if subject to temperatures over 50°C).

3.12.7 All pipes shall be renewed every two years.

3.12.8 All gas appliances shall be fitted with a flame failure device and adequately ventilated.

3.12.9 All fryers shall be fitted with an automatic high temperature-limiting device (operates at a fan temperature of 250°C or lower).

3.12.10 Suitable signs indicating "Caution – LPG" and "Highly Flammable" shall be displayed

3.13 **Induction Heating**

3.13.1 Electrical appliances must be protected from weather, physical damage and interference.

3.13.2 Appliances must be protected by residual current circuit breakers.

3.14 **Fire Safety**

3.14.1 All interior materials shall comply with the flammability requirements specified in IS: 15061, as notified under CMV (A) R, 1989 though the standard does not covers special function vehicles in the scope.

3.15 Fire Extinguisher

3.15.1 The cooking compartment of the Mobile Canteen shall be equipped with fire extinguisher of 2 kg capacity.

APPENDIX 1 TO ANNEX2

INFORMATION TO BE SUBMITTED AT THE TIME OF APPROVAL OF MOBILE CANTEEN

Sr.no	General	Details
1.0	**Manufacturer details**	
1.1	Name and address of the manufacturer	
1.2	Name of variants, if any:	
1.3	Plant/(s)of manufacturer:	
2.0	**Description of vehicle under test**	
2.1	Vehicle category	
2.1	Vehicle model	
2.2	Vehicle type	
2.3	Vehicle manufacturer	
2.4	CMVR certificate no	
2.5	Chassis no	
2.6	Engine no	
2.7	Engine displacement	
2.8	Fuel type	
2.9	Dimensions (mm)	
2.10	length	
2.11	width	
2.12	height	
2.13	Ground clearance	
2.14	Wheel base	
2.15	Gross vehicle weight	
2.16	Seating capacity	
3.0	**Cooking Facility**	
3.1	PESO approval certificate number	
3.3	Schematic representation	
4.0	Details of the alterations done on original vehicle (applicable for retrofitter/ body builder)	

ANNEX- A
(See Introduction)

COMPOSITION OF AISC PANEL ON SPECIAL PURPOSE VEHICLE *

Chairperson	**Organization**
Shri D. P. Saste	Consultant, MoRTH
Members	**Representing**
Mr. A. A. Badusha	ARAI
Dr. A. V. Marathe	ARAI
Mr. Kamalesh B. Patil	ARAI
Mr. Pratik Nayak	ARAI
Ms. Vijayanta Ahuja	ICAT
Mr. S. N. Dhole	CIRT
Mr. Mangesh Pathak	CIRT
Mr. Uday Harite	ACMA
Mr. P. S. Gowrishankar	SIAM (Tata Motors Ltd.)
Mr. Sharad S. Bhole	SIAM (Tata Motors Ltd.)
Ms. Namrata Deb	SIAM (Tata Motors Ltd)
Mr. V. G. Kulkarni	SIAM (Mahindra Truck & Bus Div.)
Mr. Arun Jalali	SIAM (Mahindra & Mahindra Ltd.)
Mr. Rajkumar Diwedi	SIAM (Maruti Suzuki India Ltd.)
Ms. Buvaneswari	SIAM (Maruti Suzuki India Ltd.)
Mr. Utsav Sherekar	SIAM (Maruti Suzuki India Ltd.)
Mr. Srikanth Nalluri	SIAM (Maruti Suzuki India Ltd.)
Mr. Faustino	SIAM (Ashok Leyland Ltd.)
Ms. Suchismita Chaterjee	SIAM (Ashok Leyland Ltd.)
Mr. S. Ravishankar	SIAM (Ashok Leyland Ltd.)
Mr. Uday Harite	ACMA
Mr. Prabhakar Chaurasia	AutoApps Engg. Soln. Pvt Ltd.

Mr. Hirdesh Singh Thakur	Pinnacle Industries
Mr. Swapnil Tambe	Pinnacle Industries
Mr. Dhanesh Subhash Patil	Nandan GSE Pvt Ltd

* At the time of approval of this Automotive Industry Standard (AIS)

ANNEX- B

(See Introduction)

COMMITTEE COMPOSITION*

Automotive Industry Standards Committee

Chairperson	**Organization**
Dr. Reji Mathai	Director The Automotive Research Association of India, Pune
Members	**Representing**
Representative from	Ministry of Road Transport and Highways (Dept. of Road Transport and Highways), New Delhi
Representative from	Ministry of Heavy Industries and Public Enterprises (Department of Heavy Industry), New Delhi
Shri S.M.Ahuja	Office of the Development Commissioner, MSME, Ministry of Micro, Small and Medium Enterprises, New Delhi
Shri Shrikant R Marathe	Former Chairman, AISC
Shri R.R.Singh	Bureau of Indian Standards, New Delhi
Director	Central Institute of Road Transport, Pune
Director	Global Automotive Research Centre, Chennai
Director	International Centre for Automotive Technology, Manesar
Director	Indian Institute of Petroleum, Dehradun
Director	Vehicle Research and Development Establishment, Ahmednagar
Director	Indian Rubber Manufacturers Research Association
Representative from	Society of Indian Automobile Manufacturers
Shri R.P. Vasudevan	Tractor Manufacturers Association, New Delhi
Shri Uday Harite	Automotive Components Manufacturers Association of India, New Delhi
Member Secretary	
Vikram Tandon	The Automotive Research Association of India, Pune