

Minutes of 57th Meeting of Central Motor Vehicle Rules-Technical Standing Committee (CMVR-TSC) held at NATRAX Pithampur, on 13th February 2020 under the Chairmanship of Shri Priyank Bharti, Joint Secretary (MVL)

List of participants is attached as **Annexure-I**.

1.0 Chairman, Shri Priyank Bharti, JS (MVL), welcomed the members and complimented the state of art facilities at NATRAX. He informed that formulation of various CMV Rules concurrent with the Motor Vehicles (Amendment) Act, 2019 is in process which covers various areas such as accreditation of test agencies, vehicle recall etc. He acknowledged the role of CMVR-TSC in taking up important subjects for discussion and providing valuable inputs. Shri P. K. Banerjee, SIAM, expressed that SIAM is thankful to Ministry of Road Transport and Highways for involving SIAM in formulating the provisions for Vehicle Recall and considering SIAM's views during the process. With these opening remarks Secretariat was requested to take up the agenda for discussion.

2.0 Confirmation of Minutes of the previous meeting :

Secretariat informed that Minutes of 56th meeting of CMVR-TSC were circulated vide letter HMR/56-CMVR-TSC/A-320 dated 23rd September 2019 and that comments are received from ICEMA (**Annexure-II**). Chairman informed that the ICEMA concerns with respect to HSRP size for CEVs as reported in the last meeting are already addressed and that a final notification G.S.R 104 (E) dated 11th February 2020 has been issued in this respect. Committee agreed to note ICEMA's views on last meeting as part of the minutes of the 57th meeting of CMVR-TSC and that minutes of 56th meeting of CMVR-TSC need not be modified.

3.0 Progress on follow-up points of the last / earlier meetings of CMVR-TSC :

(i) Status of AIS / IS standards notified under CMVR :

Secretariat informed that in the last meeting Chairperson had requested to put forth the status of AIS and IS standards notified under CMVR so as to deliberate regarding conversion of AIS standards to IS standards. Secretariat highlighted that the subject was discussed in 63rd and 64th meeting of AISC wherein it was agreed to hold a special meeting on the subject to work out an action plan. The meeting is proposed to be held on the sidelines of forthcoming meeting of TEDC on 17th February 2020. The status will be reported in the next meeting. Committee noted the information.

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(ii) Radio Frequency Allocation for various Automotive Applications :

Committee noted that the proposed inter-Ministerial meeting could not take place and hence there is no update on the subject.

(iii) Crash Guards / Bull Bars :

Ms. Vijayanta Ahuja, ICAT, presented the progress on the subject. Her presentation is attached as **Annexure-III**. She presented the recommendations for 2 and 4 wheelers and highlighted that no fitment is proposed for 3 wheelers. Ms. Ahuja expressed that few manufacturers making crash guards and bull bars have expressed their intent to meet the standards as applicable. Committee noted the information and it was agreed that crash guard and bull bar manufactures should meet the proposed standards as given in the presentation. Further, it was agreed that the proposal for allowing fitment of crash guards and bull bars should be supported with requisite test data. SIAM members opined that for crash evaluation, only original fitments are taken into consideration and any afterfitment might alter the crash compatibility of passenger cars.

Chairman enquired whether specifying the material for such structures could achieve the safety and other requirements. Director ICAT opined that the standard should not prescribe any specific material and efforts are therefore made to only include performance evaluation. In the absence of data it was decided to discuss the matter in the next meeting of the CMVR-TSC.

(iv) Approval of Two-wheelers retro-fitted with Fire Fighting Equipment :

Ms. Vijayanta Ahuja, presented an update on the subject. Her presentation is attached as **Annexure-IV**. She informed that based on direction from Shri D. P. Saste, Convener - Special Purpose Vehicles Standard, draft standard was circulated for comments to all the panel members on 28th January, 2020. She highlighted that only open point for discussion is with respect to warranty of the end product and responsibility of retrofitter. She informed that the technical contents of the standard are finalized and proposed that the standard can be approved. Further, considering the need for finalizing the provisions at the earliest and for ease of use, the provisions may be covered under a separate AIS standard. Shri Saste informed that it is proposed to notify the provisions in CMV Rule 125. The rule will enable both OEMs and retrofitters. Further, the issue of responsibility regarding warranty shall be of retrofitter as PTO power is tapped

and same would be suitably addressed in either the standard or the notification. Committee noted the information and agreed with the action plan. It was agreed that standard may be adopted in principle and comments received, if any, may be suitably addressed before finalizing the standard. It was also clarified that such vehicles would be registered under the Transport Category.

(v) Discussion on the latest status and the way forward in respect of following special purpose vehicles :

i). Insulated Vehicle (Refrigerated Van / Reefer Van)

Secretariat presented the progress on behalf of Convener Shri A. A. Badusha, ARAI. The presentation is attached as **Annexure-V**. Secretariat informed that the subject was discussed in 56th meeting of CMVR-TSC and 63rd meeting of AISC wherein it was decided to formulate an AIS for all types of special purpose vehicles viz., Reefer Van, Food Truck, Cash Van, Fire Fighting Vehicles etc. However, considering the complexity, need and urgency, it was felt that requirements for Insulated Vehicle (Refrigerated vehicle / Reefer Van) may be covered in a separate standard. Accordingly, a draft standard was prepared and circulated to reefer van manufacturers to get initial feedback. The scope and structure of the standard was highlighted. It was informed that the subject would be deliberated by the panel once inputs are received from stakeholders. Committee noted the information and agreed to review the status in the next meeting.

ii). Cash Van and Food Service Truck

Secretariat presented the status on the subject. The presentation is attached as **Annexure-VI**. It was informed that a technical panel under the Convenorship of Shri D. P. Saste was formulated to take the subject forward. A panel meeting was held on 2nd December 2019 and based on the discussions in the panel meeting a draft standard was prepared by Secretariat and sent to Panel Convener for review. Shri Saste highlighted that after his review the draft will be circulated to the panel subsequently. He added that provisions with respect to reefer van, cash van and food service truck will be addressed in CMV Rule 125 as well as in forthcoming rules related to alteration/retrofitment.

iii). Vehicles for transport of radioactive materials

Shri K. C. Sharma, MoRTH, informed that responsibilities with respect to consigner, consignee and transporter are under formulation. The work is in progress along with FICCI and it is proposed to align the requirements as per ADR. He informed that preliminary recommendations are expected to be formulated in due course time and a way forward will be presented for consideration in the next meeting of CMVT-TSC. Shri P. K. Banerjee, SIAM, inquired if there is any plan to replicate the work done, under WP.15, in India. Shri Sharma clarified that only two sections from ADR which are related to transport are referred presently however secretariat to explore the relevance of the W.15 work in the Indian context and my put up the progress in next meeting. Committee noted the information and agreed to review the subject in the next meeting.

(vi) Definition of Hybrids - mild & strong hybrids vehicles :

Secretariat informed that as per directions in the last meeting Secretariat reviewed the need for changes needed, if any, in CMVR to address the subject. It was informed that FAME II notification S.O. 1472 (E) dated 28th March 2019 includes definition of Hybrid Electric Vehicles, Strong Hybrid Electric Vehicle (SHEV), Plug-in HEV (PHEV)/Range Extended Electric Vehicle (REEV) and Battery Electric Vehicle (BEV). However, upon review it is concluded that provisions under CMVR are adequate. Also, definitions in FAME notification are already covered in AIS 102 which is notified under CMVR. Chairman expressed that Shri K. C. Sharma may review the existing provisions in light of registration requirements of Hybrids in Vahan portal and report the progress in the next meeting.

(vii) Analysis of vehicle fire - causes and preventive measures :

Ms Vijayanta Ahuja, ICAT, presented the update on the subject. Her presentation is attached as **Annexure-VII**. She informed that SIAM conducted a study on the subject in year 2014 and it was revealed that major source of fire was use of aftermarket accessories which are not approved by OEM and tampering with wire harness. She highlighted that upon evaluation of some fire incidents by ICAT the possible reasons were identified for fires were fuel leakages, overheating, short

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circuits, retro fitment - parts, aftermarket fitment and poor maintenance. She highlighted certain recommendations to address the issue viz., awareness program by OEM/Dealer, introduction of FDAS & FDSS, checks at I&M center and Safety Standard such as Flammability / Fuse test reports to have validity period. Chairman highlighted the importance of the subject and that it needs to be continuously reviewed by the Committee. Shri P. K. Banerjee, SIAM, expressed that SIAM would arrange dedicated events to increase awareness among the vehicle users.

(viii) Accommodation of Wheelchair in M1 category vehicles :

Secretariat informed that based on the discussions in 56th meeting of CMVR-TSC (22nd August 2019) the subject was taken up for discussion in 63rd meeting of AISC and it was agreed to form a panel under Convenorship of Shri A. V. Mannikar, ARAI to review the subject. The terms of reference of the panel were finalized in the 64th meeting of AISC and panel will hold its first meeting in last week of February 2020. The progress on the subject will be reported in the next meeting of CMVR-TSC. Committee noted the information.

(ix) BS VI CNG / LPG Retro fitment - Rule Position and Way Forward :

Ms. Vijayanta Ahuja, ICAT, presented the progress of the work done, by the Committee under the Chairmanship of Director ICAT, on the subject. Her presentation is attached as **Annexure-VIII**. She highlighted the recommendations of the Committee vis-à-vis the existing requirements. Shri Dinesh Tyagi, Director ICAT, informed that consensus could not be achieved during the Committee meeting and that the recommendations have been prepared to maintain a balance for both the retro fitters and OEMs. Shri Anoop Bhat, SIAM, highlighted that with ageing, CNG catalyst performance deteriorates drastically and the actual emissions is very high and therefore calibration has to be very specific. He emphasized though in the proposed recommendations the tolerance band for defining families in case of retrofit approvals has been tightened, the catalyst design issue is not addressed. Therefore, retro fitment kits should not be encouraged. Shri Balraj Bhanot, IAC, proposed that provisions in Europe on the subject may be reviewed to arrive at a solution. He requested the Chair to hold a separate meeting with concerned stakeholders to resolve the issue. Committee

noted the information and it was agreed that a special meeting with all concerned stakeholders will be held at MoRTH to discuss the subject.

4.0 Issues for Discussion :

(i) Review of CMVR and AIS standards in view of the changes in definition of L1 category :

Secretariat presented the details on the subject. The presentation is attached as **Annexure-IX**. It was informed that definition of L1 category vehicle was revised vide G.S.R 1225 (E) dated 20th December 2018 and the comparison of definition before and after the said notification was highlighted. It was proposed that technical safety provisions should not be relaxed and the change should only facilitate driving license requirements. In view of the same a clarity in CMV Rule was proposed which will specify that requirements specified in CMV Rules for L2 category shall be applicable for those vehicles of L1 category, whose maximum speed exceeds 45 km/h or in case so specified, maximum speed of 50 km/h. Chairman informed that changes in CMV rules are under discussion which also addresses the demarcation between L1 and L2 category vehicles. He Informed that draft amendments are under issuance and he invited members to offer views on proposed changes. Shri Saste informed that re-alignment with definitions of vehicle categories under 1968 Vienna Agreement is also being studied and if feasible needs to be addressed in view of the licencing requirements as per the international traffic.

(ii) Process of conversion of vehicle category from M3 to N :

Secretariat informed that MoRTH has received a submission from Road Transport Department (Maharashtra) wherein Maharashtra State Road Transport Corporation (MSRTC) has requested to consider a proposal of converting their fleet of buses which are more than 10 years old to Ambulances and N category vehicle like tankers. It was highlighted that as per provisions of section 52 (1) of the MVA, 1988, alteration / conversion involving change in the particulars contained in the certificate of registration which will be at variance with those originally specified by the manufacturer is prohibited. However, as per third proviso to section 52(1) of MVA, Central Government has powers to grant exemption for alteration of vehicles in a manner other than the ones specified in the said provision.

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Shri S. Ravishankar, SIAM, highlighted that the proposed alteration changes the original character of the vehicle for which it was designed and therefore such alteration shall not be allowed. Shri P. S. Gowrishankar, SIAM, expressed that design inputs for a passenger and goods vehicle are entirely different and therefore change of class of vehicle as proposed may pose safety issues. Committee noted the information and it was agreed that the proposed alteration shall not be allowed.

(iii) Increase of life of buses and cars from 8 years to 12 years covered under All India Permit :

Secretariat informed that Ministry has received a proposal from Bus and Car Operators Confederation of India, requesting that buses and cars covered under All India Permit to be remain operational under the same permit from existing 8 years to 12 years for the vehicles which are meeting BS III norms and beyond. Shri S. Ravishankar, SIAM, expressed that considering the vehicles are legally allowed to be registered for fifteen years, there is apparently no technical reason to restrict the permit duration. However, the fitness provisions in the CMV rules should be complied with. Shri P. K. Banerjee, expressed that SIAM will review the subject in detail and would submit its recommendations to the Ministry. Committee noted the information and it was agreed to review the subject in the next meeting based on the input from SIAM as well as BOCI.

(iv) Request for granting access to OEM Wise Vehicle Registration Data as available on Vahan platform :

Secretariat informed that FADA has requested access to OEM Wise Retail Registration Data as available on Ministry's Vahan Platform for both National and State Level. Committee noted the information. However, it was noted that no representative of FADA was present hence it was decided to discuss the subject in the next meeting in presence of FADA representative.

(v) Provision of different size tyre as a spare tyre :

Secretariat informed that Ministry has received a submission with respect to supply of lower size tyre as a spare tyre by OEMs. Committee noted that the current provisions with respect to temporary use spare wheel are given in AIS 110. The AIS clearly defines a standard spare unit and a temporary use spare

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unit. It was highlighted that provision of temporary tyre is to facilitate the end user to reach the garage for repairs. Shri Gururaj Ravi, SIAM, presented the current provisions in AIS 110. His presentation is attached as **Annexure-X**. Shri P. K. Banerjee, highlighted that the provisions with respect to provision of temporary use spare tyre were adopted 5 years back and now with the advancement in technology it has been agreed to provide tyre puncture repair kit as a replacement to spare tyre. Also, this aspect is considered while designing the vehicle and therefore the vehicle may not have space for a normal usage tyre even if the end user opts for it in place of temporary use tyre. Committee noted that though the provisions of temporary use tyre are well established the OEMs should ensure customer awareness as well their acceptance regarding the same. Chairman expressed that a proper communication (such as sticker inside the vehicle, mention in the user's manual) could be used to convey the intent. It was agreed that SIAM will review the subject and propose a way forward in the next meeting.

(vi) Difficulty in implementing the provisions of the sub-rule (1) and (2) of CMVR 125E regarding transportation of livestock :

Secretariat informed that Ministry has received a submission from All India Buffalo & Sheep Meat Exporters Association (AIMLEA). Secretariat made a presentation on the subject highlighting the observations made by AIMLEA and the current provisions under CMVR. The presentation is attached as **Annexure-XI**. It was highlighted that the rules specify that motor vehicles used for transportation of livestock by road shall be in accordance with the specifications of the Bureau of Indian Standards as provided in IS: 14904:2007 or IS: 5238:2001 or IS:5236-1982, as the case may be, and the transporter or consigner of the livestock shall follow the code of practice laid down in the respective specification regarding the transport of the livestock. Further, minimum sizes of enclosures have been specified for respective animals. It was noted that though the standards are in place for governing the design of vehicles to carry livestock, the enclosure sizes defined in the rule are in variance with the provisions specified in IS standards as well as international standards. It was agreed that the size of the enclosure should as per the directions given in the respective IS standards/international standards and accordingly subject matter is to be studied and based on the findings, sub rule 2 of CMV Rule 125 (E) may be taken up for

modification suitably. Secretariat was requested to do the needful and submit a proposal for the for consideration of the Ministry.

(vii) Presentation on 3 W vehicle designed for specially abled persons and senior citizens - creation of a separate category :

Secretariat informed that a proposal is received with respect to creating a separate vehicle category in line with vehicle category L2e in Europe. The details of the vehicle were presented as. attached at **Annexure-XII**. Committee noted the information and deliberated on the need for creation of a separate category in India. Mrs. Rashmi Urdhwareshe, Director ARAI, expressed that while the Committee may agree to create a separate category in line with that in Europe, this should not lead to granting CMVR exemption similar to what is available for low power battery operated vehicles. Safety of the users should not be compromised and approval requirements should be addressed appropriately. Mr. R. Narasimhan, SIAM, agreed with the views and proposed that new vehicle category along with complete set of regulations which are applied to it in Europe need to be refereed while introducing the new vehicle category. Shri D. P. Saste, MoRTH, opined that a new vehicle category may be created considering the specific constructional features and application. Committee noted the information and requested AISC to deliberate on the subject in detail.

(viii) Registration of 3 W electric vehicles :

Shri A. V. Kumbhar, SIAM, presented the details. His presentation is attached as **Annexure-XIII**. He highlighted the registration issues with respect to fleet registration of electric auto rickshaw. He expressed that fleet / corporate ownership will help in better management and faster penetration of electric auto rickshaw in the market. He informed that whereas some state transport authorities (STA) allow the fleet registration some others are seeking clarity. He requested MoRTH to issue an advisory to all STA in this regard. Shri D. P. Saste, MoRTH, informed that fleet registration is a issue in some states where in person registers a fleet and hire it out to individuals for operation in case of E Rickshaw and similar provisions are sought for electric auto rickshaw. Committee noted the information and it was decided to study the permit conditions and state powers based on the inference further actions are to be taken.

(ix) Creation of 3 W electric vehicle having less than 0.25 kW (thirty-minute power), maximum speed 25 km/h and unladen weight not more than 60 kg :

Secretariat presented the proposal for deliberation. The presentation is attached as **Annexure-XIV**. It was informed that it is proposed to introduce a battery operated 3 W ice cream cart, running on small power motor instead of conventional ones having manual paddling. The vehicle will use motor and controller with the net power of that product less than 250 watt and speed in the range of 12 to 15 kmph. It was highlighted that presently exemption from definition of motor vehicle is given to small engine vehicle irrespective of number of wheels whereas in case of battery operated vehicles, such exemption is available only to 2 W battery operated vehicles. In this regard a request is received to extend the exemption to 3 W low power battery operated as well to facilitate introduction of 3 W ice cream cart.

Further, Secretariat presented ARAI's views on the subject. The presentation is attached as **Annexure-XV**. It was informed that presently test agencies test low power vehicles to verify the exemption criteria and accordingly issue an exemption report only. These low powered vehicles, being exempted from classification as motor vehicle, are not registered. Therefore, no requirements for driving license for driver, insurance, traffic violations etc. as per MV Act are applied. However, it is reported that in many instances Manufacturers / dealers of exemption category BoVs, while supplying vehicles in the field, tamper with motor controller settings to increase the motor power and/or to increase speed above the limits specified for such vehicles. This is violation of exemption classification under CMVR for which approval is granted by Test Agencies and several complaints from field, RTI queries and also legal notices are received in this regard. Further, due to such malpractices, the low powered category BoV (2W) has been removed in FAME-2 scheme. In view of the above following recommendations are given:

- a) Exemption may be granted as per CMV Rule 2(u) to only electrically assisted bi-cycles.
- b) Separate low speed 2W BoV category may be introduced (motor power < 500 W, max speed < 35 km/hr)
- c) These vehicles need to be registered, insured, driving license for 16 years of age and above and traffic rules should be applicable.

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d) For extending this category to 3W BoV, possible overlap with E-rickshaw/E-cart category may be taken into consideration. Limited type approval requirements may be defined for this category on similar lines as those available for E-rickshaw and E-cart. Also the feasibility of three wheeled paddle assisted electric rickshaw was also discussed.

Committee noted the information presented by ARAI. Committee concluded that secretariat to put up the proposal for the consideration of the ministry and further actions.

(x) Discussion on the mandatory provision for airbag for the co-driver seat :

Chairman highlighted that Supreme Court Safety Committee has directed to review the provisions for co-driver airbag. Considering that initially it was decided to provide driver airbag to start with, which got subsequently mandated from 1st April 2019, it is time to review the provisions for co-driver airbag as well. Shri Gururaj Ravi, SIAM, made SIAM's representation on the subject. His presentation is attached as **Annexure-XVI**. It was highlighted that in Europe too airbags are not mandated and the safety performance is specified in terms of injury criteria. These can be met with or without airbags. Further, it was emphasized that vehicle trim design considering individual item is impractical. Committee noted the information. SIAM was requested to provide specific test data in support of the argument within two weeks for the consideration of the Committee.

(xi) Provision for wheel chair entry requirements in AIS 052 in line with AIS 153 :

Committee deliberated on provisions with respect to ease of access for wheel chair bound passengers in buses. Chairman highlighted the focus of PMO on the subject and informed that directions are to provide maximum convenience to divyangan and elderly citizens. He also alluded to the discussion with the Joint Secretary in the Ministry of Social Justice and Empowerment and mentioned that we must be sensitive to the needs of Divyajan as anyone who is Able today is Disabled tomorrow. Secretariat informed that as per earlier discussions in CMVR-TSC an amendment to AIS 052 (Rev. 1) was published to cross refer the provisions available in AIS 153. Shri S. N. Dhole, CIRT, highlighted that provisions in AIS 153 addresses buses with floor height upto 650 mm and for buses with floor height above 650 mm there is an issue. Shri Balraj Bhanot informed that in Delhi lifts in

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buses have been made mandatory. Committee noted the information and it was felt that along with requirements on vehicle front, the supporting infrastructure such as bus stops too should be reviewed to facilitate ease of access. Committee requested ASRTU to work on a specification document for bus stations and submit the same to the Committee within two months for consideration. It was agreed to review the subject in the next meeting.

(xii) Addition of Sodium Cyanide (solution) in the category of Dangerous Goods :

Shri K. C. Sharma, MoRTH, informed that in the list of hazardous goods as specified in Table III (List of Hazardous Goods) in CMVR 137 currently Sodium Cyanide is listed at Sr. No. 1943. The form in which it can be transported is in solid form such as powder or bricks. It is proposed to allow transport of the same in liquid form too. Shri D. P. Saste informed that the objective of raising the agenda item in CMVR-TSC was to explore the right forum or bodies to which such queries can be addressed. Shri P. K. Banerjee, SIAM, suggested that specific knowledge of the subject is not available with members the subject may be discussed with experts like NEERI. Committee noted the information and agreed that requisite steps may be taken in consultation with experts.

(xiii) Truck Cabin Safety :

Shri K. C. Sharma, MoRTH, informed that a representation is received wherein it is submitted that notified provisions in CMVR with respect to Truck Cabin Safety are not complied with by Truck Body Builders. Shri P. K. Banerjee, SIAM, requested Ministry to ensure that provisions are equally applicable leading to level playing field for both OEMs and Truck Body Builders. Committee noted the concern and it was agreed to call a separate meeting at MoRTH with all stakeholders including truck body builders to discuss the issue.

5.0 Report from AISC :

(a) Standards and amendments for deliberations / adoption :

Secretariat informed that 12 Amendments to AIS standards were approved in 63rd and 64th meeting of AISC. The details of the amendments were circulated with the agenda for the 57th meeting of CMVR-TSC. The same are attached as **Annexure-XVII**. Committee noted the information and adopted the proposed amendments.

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Further Secretariat presented the details on the following standards and proposed for their adoption. The presentation is attached as **Annexure-XVIII**. The Committee noted the information and after due deliberations adopted the proposed standards. The lead time for implementation is as given below:

1. AIS 004-Part 3 Rev 1: Electromagnetic Compatibility (EMI/EMC)
Implementation: It is proposed to review the implementation date for the revised standard after October 2020. In the interim the standard may be used for development work and testing.
2. AIS 024 and AIS 028 (Rev. 1) (Part A): Safety and Procedural Requirements for Type Approval of Gaseous Fuel Vehicles and Code of Practice for Use of Gaseous Fuels in Internal Combustion Engine Vehicles (Revision-I) (Part A) (Automotive Application)
Implementation: The revised version of AIS 024 and AIS 028 are already notified vide G.S.R 1151 (E) 29 November 2018.
3. AIS 024 and AIS 028 (Rev. 1) (Part B): Safety and Procedural Requirements for Type Approval of Gaseous Fuel Vehicles and Code of Practice for Use of Gaseous Fuels in Internal Combustion Engine Vehicles (Revision-I) (Part B) (Tractor Application)
Implementation: The revised version of AIS 024 and AIS 028 are already notified vide G.S.R G.S.R 1151 (E) 29 November 2018.
4. AIS 038 Rev 2: Specific Requirements for Electric Power Train of Vehicles
Implementation: 3 years from date of notification.
5. AIS 088 (Rev.1): Performance Requirements of Rear Marking Plates (Rear Warning Triangles) for Automotive Vehicles, Agricultural Tractors their Trailers and Semi-Trailers
Implementation: 1 year from date of notification.
6. AIS 156: Specific Requirements for L Category Electric Power Train Vehicles
Implementation: 3 years from date of notification
7. AIS 158: Code of Practice for Type Approval of Modular Hydraulic Trailers towed by Puller Tractor of Category N3
Implementation: 1 year from date of notification.

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8. AIS 160 : Safety requirements for Construction Equipment Vehicles
Implementation Plan: AIS-160, along with provisions for Braking system, Turning Circle Radius and Turning Circle Diameter, Steering Effort and Noise to be notified in two phases as per the following schedule:

Part 1 of AIS 160 along with Braking system, Turning Circle Radius and Turning Circle Diameter, Steering Effort and Noise (Phase 1)	1 st April 2021
Part 2 of AIS 160 along with Noise (Phase 2)	1 st April 2024

Committee requested Secretariat to submit the finalized drafts of the above standards to the Ministry for hosting on MoRTH website. Also, Secretariat was requested to submit the draft notifications as per the agreed timelines given above to the Ministry for consideration.

Committee further deliberated on adoption of AIS 161: Procedure for Accreditation of Testing Agencies. Shri K. C. Sharma, MoRTH, informed that the standard is being studied and would be reviewed further before taking up for adoption. Shri S. Ravishankar, SIAM, expressed that SIAM would also like to submit its comments on the standard which may be considered before finalizing the standard. Committee noted the information and agreed to take up the standard for adoption in the next meeting after proper review.

(b) Report by AISC on running subjects :

Secretariat presented the progress on the following subjects which are under discussion in AISC. The detail presentation is attached as **Annexure-XIX**.

1. Motor Vehicle Part Compliance Requirements

Committee noted that creation of a web portal has been agreed in AISC. The need for the same was endorsed by the Committee.

2. New AIS on Hydrogen Fuel Cell vehicles

Committee noted that the standard has been principally approved in AISC. The Committee agreed to adopt the standard in case there are no comments received on the approved draft hosted on ARAI website. The same, once finalized, can be sent to Ministry for hosting on MoRTH website. The implementation time for the same will be reviewed in the

next meeting. Further it was informed that apart from formulation of standard and its notification under CMVR additional steps need to be taken such as notification of hydrogen fuel with purity index greater 99.97 % in line with ISO 14687 and SAE J2719 for better fuel cell stack operations and life and issuance of safety guidelines for hydrogen re-fuelling stations in line with global practices. Secretariat will submit details with respect to the additional steps (as indicated above) for perusal of the Ministry.

3. AIS-162 Advanced Emergency Braking Systems (AEBS)

The panel is working on formulating a standard on AEBS for M2, M3, N2 and N3 category vehicles. Demonstration trials of the AEBS technology for commercial vehicle and passenger car were arranged, during the third panel meeting, to understand the functioning of the system in detail. A need for initiating a project to review the performance of the technology in Indian traffic conditions has been envisaged. It was informed that ESC is a prerequisite for AEBS and that EVSC for buses manufactured by OEM is mandated from 1st April 2023. Considering the same there is significant time for AEBS implementation. In view of the above it is felt that requirements with respect to forward vehicle collision warning systems (FCWS) can be worked out first. Also, this is independent of the implementation of EVSC. Basic requirements of in-lane collision warning are covered in draft AIS 162 whereas ISO 15623 covers the same in detail including design calculation and guidelines. The requirements for FCWS will be finalized in either a different standard or as part of AEBS standard.

4. AIS 166 - New AIS on protective devices for two wheelers

Draft D3 of the proposed standard is hosted on ARAI website and circulated to all panel members for seeking comments till 15th February 2020. Comments are received from SIAM. The same will be reviewed and the standard will be finalized accordingly.

5. Extending scope of AIS-145 to other than M1

Committee was informed that an important step in enhancing safety for driver and co drivers, in vehicles categories such as Quadricycle, M2, M3 and N, is proposed to be taken up by implementing revised IS 15140.

The seat belt requirements are proposed to be mandated for all front facing seats of N1 and M2 category of vehicles which are less than 3.5 ton. It is felt that this step is a logical prerequisite before implementing airbags. Further, transport categories vehicles are to be mandatorily fitted with speed limiting devices and thus the need for speed beep becomes redundant. Also, requirement of manual override is not needed for bus and trucks considering their nature of door and body construction. The panel after detailed deliberations on the subject concluded that requirements such as airbags, speed beep, seat belt reminder and manual override need not be mandated for L7, M2, M3 and N categories of vehicles. The subject may be reviewed, if needed, after implementation of safety belt requirements for such categories. Committee noted the information and agreed with the recommendations.

6. AIS for Battery Operated Agricultural Tractors

In absence of any UN Regulation on the subject, reference is drawn from EU Directives 167/2013, 2015/208 and 3/2014, while formulating a draft AIS. The electric safety requirements are based on two and three wheeler directive 03/2014. Relevant AIS standards have been referred for requirements with respect to REESS safety, motor power, and EMC. The standard is under discussion.

7. Super Single Tyre

It was informed that the subject is under discussion in AISC. Tyre industry has been requested to propose wide base tyre sizes for incorporation in IS 15636 before the next panel meeting. AISC has agreed that suitable tyre sizes can be picked from ITTAC manual in absence of data submission by tyre industry.

Committee noted the progress on the subjects and agreed to continue to review the subjects under discussion in AISC in next meeting.

(c) Notifications for Consideration for implementation of various IS standards in CMVR :

Secretariat informed that the implementation plan for the following IS standard was discussed in the 63rd and 64th meeting of AISC.

1. IS 15140 :2018 (Automotive Vehicles - Safety Belt and Restraint Systems - Specification (First Revision) and IS 16694:2018 (Automotive Vehicles - Safety Belts, Restraint Systems and Safety Belt Reminder - Installation Requirements)
2. IS 16833: 2018 (Automatic Tracking devices (ATD) and Integrated System)
3. IS 3028 (Part 3):2018 (Automotive Vehicles - Noise Emitted by Moving Vehicles - Specification and Method of Measurement - Part 3 L5 Category)
4. IS 16712: 2018: Automotive vehicles: Spray Suppression System for Two Wheeled Vehicles.

It was informed that the proposed notifications were circulated along with the agenda for the 57th meeting of CMVR-TSC and the same are attached as **Annexure-XX**. It was proposed that in absence of any comments from the members the notifications can be adopted. Committee noted the information and it was agreed to adopt the proposed notifications. Further, Committee noted that implementation of IS 16833 is adopted subject to publishing of Amendment 2 to IS 16833 so as to align it with AIS 140 which is currently notified.

Committee further reviewed the transitional provisions for revised IS 2553 (Safety Glazing). It was noted that Draft G.S.R 103 (E) dated 11th February 2020 is already published to notify revised IS 2553 in CMVR. Committee agreed to adopt the transitional provisions prepared as per the provision given in AIS 000 for approvals to be granted as per revised standard till such time the final notification is published. The proposed transitional provision is attached as **Annexure-XXI**.

Secretariat was requested to submit the finalise manuscript of the adopted notifications to the Ministry for consideration.

6.0 Finalized Draft AIS (hosted on MoRTH Website)

Secretariat informed that finalized draft of AIS-017(Part 6) (Procedure for Establishing Whole Vehicle Safety Conformity of Production (WVSCOP) for L, M, N category of vehicles, E-rickshaws & E-carts was hosted on MoRTH website on 21st November 2019

to seek comments. It was noted that no comments are received and therefore Committee approved the publishing of the standard.

7.0 Review of notifications

Secretariat informed that in the earlier meetings, Committee had approved draft notifications for implementation of various AIS and IS under CMVR. Committee may like to review the status of some of the important notifications submitted as highlighted below:

a) CMVR 93: Vehicle Dimensions

Shri K. C. Sharma, MoRTH, informed that the draft G.S.R 887 (E) dated 29th November 2019 was published. He informed that in the draft notification in case E-cart/E-rickshae letnth is amended from 2.8 mterer to 3.2 mter and width is amnded from 1 meter to 1.1 ,meter in view of the sitting space required fro the passengers and working space required fro the driver. He informed that some manufactierers and ICAT submitted comments suggesting that exsting diemnsions are set based on the actual data. Further he informed that amendment of diemnsions of E-Cart and E-Rickshaw will be taken up after the sudy by ICAT taking in to consideration of human body ergonomics. Further, Quadricycle issue was discussed and SIAM suggested that will they will discuss amongst their menbers and will revert back. Further, the length of M1 is proposed as 12 m which is in line with those available in Europe Shri Sharma highlighted that comments have been received with respect to increase in height of transport vehicles (other than double decked) from 3.8 to 4 m with respect to stability issues. Committee noted that the dimension has been aligned with that in Europe and vehicles designed with these dimensions have been running on roads already and therefore the proposed dimension of 4 m should be retained. Shri P. K. Banerjee, SIAM, informed that SIAM has initiated a study along with Prof. Anoop Chawla, IIT Delhi, with respect to height of trailers and number of decks inside the trailer used for carriage of vehicles and the findings will be shared with the Committee based on which committee may discuss and decide appropriatly. Committee noted the information and it was agreed to finalize the notification in the present form as was released as draft notification except the mendment in the dimensions of E-cart /Erickshaw. The actions identified with respect to E Rickshaw and SIAM study will be reviewed later and if needed the notified rules may be amended later.

b) CEV Safety Roadmap

Secretariat informed that as directed by Ministry AIS 160 on Safety Requirements for Construction Equipment Vehicles has been formulated and adopted in today's meeting. The proposed notification to implement the standard shall be submitted to Ministry for consideration. Shri K. C. Sharma, MoRTH, informed that the same will be taken up for processing.

c) Whole Vehicle Safety COP

Committee noted that Whole Vehicle Safety COP standard has been proposed to be notified under Rule 126. Further, complete Rule 126 is in process of modification considering the amendments in Motor Vehicle Act. The standard will be taken up for notification subsequently.

d) AIS 142 Tyre rolling resistance, rolling sound and wet grip

Shri Vinay Vijayvargia, ITTAC, requested the Committee to review the implementation of the standard considering the readiness of test facilities. He informed that a submission has been made by the Tyre Industry to the Ministry in this regard. Committee noted the information.

e) Safety standards for Two wheelers (AIS 146, 147 and 148)

Committee noted that Draft G.S.R 103 (E) dated 11th February 2020 is published. Shri Arvind Kumbhar, SIAM, highlighted that the notification was adopted in the 56th meeting of CMVR-TSC with a lead time of 18 months for all three standards. The lead time is required for technical development to address the new requirements. However, the Draft G.S.R proposes to notify the three standards from 1st October 2020 which provides a lead time of only six months. However, date of implementation of Tyre Repair kit may not require any lead time. As such implementation may be from the date of notification. Committee noted the information and agreed to review the decision based on the decisions taken in last meeting.

f) Tyre puncture repair kit and TPMS

Committee noted that Draft G.S.R 103 (E) dated 11th February 2020 is published.

8.0 Any other points with permission of the Chair :

(a) Points proposed by ICEMA :

Secretariat presented the ICEMA's points for the consideration of the Ministry. The presentation is attached as **Annexure-XXII**. The key points raised by ICEMA are as follows:

- i). Exemption from registration of Off-highway CEMM equipment like Cold Recyclers / Soil Stabilizers, Cold milling machines, Large size Wheel Loaders, Dumpers etc.
- ii). Maximum allowable height for CEVs, when they are loaded on a truck (for transportation) to be changed from 3.8 m to 4.75 m.
- iii). Changes required in Vahan Portal for addressing registration issues of CEVs.
- iv). ICEMA's proposal of using 200*100 size HSRP was not specified in the MoRTH notification dated 18th July 2019.
- v). Request to issue a notification increasing the maximum Safe Axle Load for CEVs (with single axle and four tyres) from 10.2 t to 12.5 t fitted with pneumatic suspension.
- vi). Re-christening the nomenclature of Emission norms for CEVs.

Shri K. C. Sharma, MoRTH, informed that issues listed at Sr. No. (i), (ii) and (iv) have already been addressed. With respect to changes in Vahan Portal it was agreed to hold a meeting with NIC representative to resolve the issue. Committee noted the request for increase in safe axle load. However, ICEMA was requested to make a detailed representation on the subject with requisite data. Also, Committee noted that re-christening the nomenclature of emission norms was discussed and agreed upon in the 61st meeting of SCOE.

(b) Points proposed by TMA :

Shri R. P. Vasudevan, TMA, submitted the following points for review. His presentation is attached as **Annexure-XXIII**.

- i). Proposal for correction in in sub rule 5A, in rule 124A.
- ii). Correction in Vahan portal, with respect to conversion system used for power of the engines.
- iii). Review of Rule 96 C with respect to facilitation of provisions to be provided on tractors for trailer braking

Committee noted that Draft G.S.R 103 (E) dated 11th February 2020 is published to address the issue listed at Sr. No. (i) above. For Sr. No. (ii) it was noted that

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the subject was discussed in last meeting and it was agreed to do the changes in Vahan portal as desired. Committee agreed to request NIC to do the required changes. With respect to changes in Rule 96-C Shri Vasudevan informed that AIS 043 (Recommendation of Braking System and Performance Requirements for the combination of Agricultural Tractor and Trailer) was earlier notified in Rule 96-C and subsequently withdrawn. Further, to facilitate implementation of AIS 043 requirements for provision of hydraulic pump and valve with suitable pipe connections on the tractor were also specified. He proposed to remove the above provisions for tractor considering that AIS 043 itself is withdrawn. Committee noted the information and requested TMA to make a detailed representation on the subject for consideration.

(c) Points proposed by SIAM :

Shri P. K. Banerjee, SIAM, highlighted the following points for review by the Committee.

i). SIAM submission on Feracrylum addition in First Aid Kit

Shri Banerjee informed that a representation from SIAM has been made to the Ministry on the implementation issues of providing Feracrylum in first aid kit. He highlighted that the G.S.R 934 (E) dated 18th December 2019 mandates provision of Feracrylum in the first aid kit from 1st April 2020. However, it is not known whether Feracrylum is to be provided with vehicles registered from 1st April 2020 or vehicles manufactured from 1st April 2020. Further, he highlighted that considering the short time available for implementation Manufacturers are facing an issue with respect to procurement process for the Feracrylum. It was informed that presently there is a monopoly of supplier of Feracrylum which cannot ensure uninterrupted supply and could possibly result in compliance issues at later stage. Also, the monopolistic situation hinders the cost aspect. In view of the above Shri Banerjee proposed that the implementation of the said rule may be deferred till such time 3 to 4 suppliers are available in the market to cater to the demand of the entire auto industry. Also, the implementation date may be linked to the date of manufacturing of vehicle for effective implementation. Additionally, Mr. Harjeet Singh, SIAM, raised a concern that supplier is forcing the OEMs to buy 15 g tube only. He requested to amend the notification by clearly specifying 5g tube of

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Feracrylum gel in the notification. Committee noted the information and decided to take necessary steps to sort out the issue.

ii). Implementation issues with respect to provisions of Vehicle tracking system in public transport vehicles

Shri P. K. Banerjee informed that State of Himachal Pradesh has empanelled the device manufacturers for selling and fitting of vehicle tracking devices. He submitted that the norms for vehicle tracking devices have been mandated by Central Government and that the device manufacturers have taken compliance as per the notified standard. The vehicle manufacturers should have a choice to select the device manufacture as long as it is complying with notified norms. He requested the Ministry to issue an advisory to the State authorities stating that manufacturers shall not be restricted to those who are approved by the State. Committee noted the information and requested Ministry to review the subject.

iii). BIS notification PUB/3/3/2019-20 dated 7th January 2020 published on 27th January 2020 for IS 13942:2020 (Part 2) establishment and cancellation of IS 13942:1994 (currently notified under CMVR)

Shri P. K. Banerjee informed BIS has withdrawn IS 13942:1994 standard, which is notified in CMVR, considering that a revised standard has been published. He highlighted that procedure for considering implementation of IS standards in CMVR are clearly defined in AIS 000 which is notified vide G.S.R. 870 (E) dated 13th September 2018. The withdrawal of notified standards in CMVR by BIS creates a compliance issue which needs to be addressed. He highlighted that industry faced a similar problem with respect to IS 2553 (Safety Glazing) standard. He requested the Ministry to issue suitable guidelines in this regard clarifying that standards notified in CMVR will remain in force till such time their status is changed in CMVR. Committee noted the information. Chairman informed that the subject will be reviewed by Ministry. It was noted that provision for concurrent running of standards is possible for IS standards and such provisions could be useful in addressing specific issues. AISC secretariat agreed to coordinate the subject.

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- 9.0** Chairman thanked the members for actively participating in the discussions. On behalf of the Committee he thanked Dr. N. Karupiah for hosting the meeting and for his warm hospitality. Committee acknowledged the efforts of the NATRAX team to come up with the state of art facility and to successfully host the CMVR-TSC meeting at NATRAX for the first time.
- 10.0** The meeting ended with vote of thanks to the Chair.
