

**Minutes of 61<sup>st</sup> Meeting of Central Motor Vehicle Rules-Technical Standing Committee (CMVR-TSC) held on 17<sup>th</sup> May 2023 under the Chairmanship of Shri Mahmood Ahmed, Additional Secretary (MVL)**

List of participants is attached as **Annexure-I**. The participant's group photograph is attached as **Annexure-II**.

- 1.0** Dr. Reji Mathai, Director - ARAI and Chairman - AISC, welcomed the new Chairman of CMVR-TSC, Shri Mahmood Ahmed, Additional Secretary, MoRTH. Dr Mathai expressed that it is an honour to have Shri Mahmood Ahmed as the Chair of the Committee, who is a seasoned Administrator and presently looking after the MVL section along with the Transport Section at MoRTH and committed full support of the Secretariat and all the stakeholders to the Chairman for running the activities of the Committee. He welcomed participants from all member organizations and requested the Chair to address the Committee.

Chairman welcomed all participants and highlighted the importance of the automotive industry in the overall development of the country. He emphasized that automotive industry is going through an important transition focused on decarbonization of transport, e-mobility, circular economy etc., and therefore the role of CMVR-TSC meetings is very important, as foundation of new regulations are laid through meaningful discussions. He acknowledged the work done by all stakeholders for giving inputs to prepare the agenda for the session and for making the CMVR-TSC more effective over the years. He requested Secretariat to take up the agenda for the meeting.

Shri A. A. Badusha, ARAI, highlighted the completion of 25 years of the CMVR-TSC and presented a list of key contributors in the working of the Committee over the years. Committee acknowledged the contributions of all stakeholders.

**2.0 Confirmation of Minutes of the previous meeting :**

Secretariat informed that Minutes of the 60<sup>th</sup> meeting of CMVR-TSC were circulated vide email dated 4<sup>th</sup> July 2022 and no comments were received. Committee noted the information and approved the minutes.

**3.0 Standards and Amendments for adoption (Report from AISC):**

Shri A.A. Badusha, ARAI, presented the details of the standards proposed to be adopted by the Committee. He informed that these standards were earlier deliberated in detail by the technical panels and were approved in either the 68<sup>th</sup> or the 69<sup>th</sup> meeting of AISC held on 20<sup>th</sup> July 2022 and 30<sup>th</sup> November 2022, respectively. His presentation is attached as **Annexure-III**.

**I. AIS 083 (Rev.1) Headlamp Cleaners:**

Shri A. A. Badusha, ARAI, presented the details of AIS 083 (Rev. 1) which covers the requirements for Headlamp Cleaners of power-driven vehicles fitted with headlamps with light source or light source module having rated luminous flux more than 2000 lm. AIS 083 (Rev. 1) was approved in the 68<sup>th</sup> meeting of AISC. The standard is in line with UN R 45. With respect to implementation of the standard it was informed that the standard will be applicable through light and light signaling installation standard. It was highlighted that installation standard is currently under revision and will cross-refer to AIS 083 (Rev. 1).

Committee noted the information and adopted the proposed standard.

**II. AIS 100 (Rev.1) Pedestrian Safety:**

Shri A. A. Badusha, ARAI, presented details of AIS 100 (Rev. 1) which covers an enhanced scope that includes M1 and M2 category vehicles having GVW up to 4500 kg and N1 derived vehicles from M1 and M2 and includes provisions for an enhanced test tool viz., FlexPLI impactor. The standard is based on UN GTR 9 Amendment 2. Additionally, it is proposed to continue with TRL (Transport Research Laboratory) impactor for another four years (concurrent running) even after implementation of the revised standard, to cater to the approval and extension of already type approved / existing vehicle models / designs. The standard is proposed to be implemented only for new vehicle models with a lead time of twenty-four months from the date of notification.

Committee noted the information and the fact that the alignment of national standard with UN GTR is part of India's commitment towards 1998 Agreement. Committee adopted the proposed standard and it was agreed that the proposed lead time will be put up for consideration of MoRTH. Chairman appreciated the work done on the subject and highlighted the need for enhancing the safety of vulnerable road users along with that of vehicle occupants.

**III. AIS 101 (Rev.1) Protection of Fuel Systems in Rear Impact:**

Shri A.A. Badusha, ARAI, presented details of AIS 101 (Rev. 1) which covers the requirement of protection of fuel systems in the event of rear impact and which is applicable to vehicle of category M1. The standard is based on UN R 34 and UN R 153. Considering the focus of the country on e-mobility, requirements for electric vehicles which are based on UN R 153 are included in the standard. It was informed that in the revised standard, mandatory impact speed is retained in line with AIS-101 (i.e. 35-38 km/h), and optionally it is allowed to conduct testing in line with latest UN R 153 (i.e. impact test speed  $50.0 \pm 2.0$  km/h). Committee was requested to adopt the proposed standard with proposed implementation date as 1<sup>st</sup> April 2025 for all models.

Committee deliberated on the deviation in test speeds for testing. Shri Anil

Kumar, SIAM and Panel Chair for Crash Standards, explained that to go for complete alignment with UN R 153, industry would require additional lead time and therefore it is proposed to follow a phase wise approach wherein the standard is implemented with existing provisions and further work on inclusion of gaseous fuel vehicles and alignment of test speeds would be taken up subsequently. Shri K. C. Sharma, MoRTH, informed that though the proposals on timelines for implementation of various standards as recommended by AISC are considered, the final review will be done by MoRTH as appropriate.

Committee noted the information and adopted the proposed standard. The proposed lead-time will be reviewed by MoRTH.

#### **IV. AIS 162 Advanced Emergency Braking Systems (AEBS):**

Shri A.A. Badusha, ARAI, presented details of AIS 162 which covers the requirements for Advanced Emergency Braking Systems for M2, M3, N2 and N3 category of vehicles. The standard is based on UN R 131. It was highlighted that considering the speed limit requirements for transport vehicles in India, the test speeds have been modified accordingly as compared to UN Regulation and the features of the AEBS systems were explained. Further, an implementation plan for mandatory fitment of AEBS systems on vehicles as per the scope of the standard was presented i.e. 30 months for new model and 36 months for existing model.

Shri P. S. Gowrishankar, SIAM, expressed that the commercial vehicle manufactures supports the introduction of this important safety feature and have come up with aggressive timeline for mandatory fitment.

Committee noted the information and adopted the proposed standard. The timelines recommended by AISC and reviewed by CMVR-TSC will be put up for consideration to Ministry.

Shri K. C. Sharma, MoRTH, suggested that various proposed regulations may be grouped and implemented with a similar timeline, based on their technical content, so as to facilitate the development work required by vehicle manufacturers as well as the testing agencies to create testing facilities. Also, this will help in the overall process of rule formulation. Chairman requested SIAM to review the timelines proposed for various standards and propose an action plan for consideration. Shri Manish Jaiswal, Director NATRAX, suggested that implementation of AEBS for M1 and N1 category vehicle may also be taken up concurrently with AIS-162. Shri A. A. Badusha, ARAI, informed that the standard for M1 and N1 category vehicle is nearing completion and it is expected to be finalized by next meeting of AISC. The notification for implementation of both standard however can be taken up together.

**V. AIS 180 Dangerous and Hazardous Goods Vehicles:**

Shri A.A. Badusha, ARAI, presented details of AIS 180 which covers requirements for vehicles of category N, T3 and T4 used for carrying Dangerous and Hazardous Goods. The standard is based on UN R 105 and ADR 2021 (Part 9).

Committee noted that existing requirements for such vehicles as addressed in in Truck Body Code (AIS 093 (Rev. 1)) are additionally supplemented with the requirements for vehicle of category N1, T3 and T4 in the new standard. The new standard also covers requirements of Mobile Explosives Manufacturing Unit (MEMU) vehicles and as compared to international references, additionally, includes requirement for automatic fire extinguisher system as per AIS-135 for the engine compartment for EX/III and MEMU vehicles. It was informed that with the approval of this standard, AIS 093 (Rev. 1) will be amended to exclude the relevant requirements. A lead time of two years was proposed for the implementation of the new standard.

Committee noted the information and adopted the proposed standard. The proposed timeline for implementation will be put up to Ministry for consideration.

Shri K. C. Sharma, MoRTH, informed that ADR documents from which AIS 180 is derived is updated on an annual basis and requested Secretariat to clarify how the update of national standard would be catered. Secretariat informed that all relevant updates can be addressed through an amendment to AIS 180 in future. With respect to Chairman's query on the process of approvals of future amendments to keep AIS 180 inline with latest ADR document, it was informed that all future amendments or revision will need to be approved by AISC and CMVR-TSC.

**VI. AIS 181 Tank Rollover Stability:**

Shri A.A. Badusha, ARAI, presented details of AIS 181 which covers requirements for Tank Rollover Stability and covers vehicles of category N2, N3, T3 and T4. The standard is based on UN R 111 and AIS 093. It was highlighted that the standard offers an option to vehicle manufacturer to choose from either a physical test or a simulation-based compliance to ensure stability requirements. Committee was requested to adopt the proposed standard. Further, a lead time of two years from the date of notification was proposed.

With respect to lead time required for implementation Shri K. C. Sharma, sought an explanation for the lead time required for implementation since the standard also offers an option for simulation-based approval which can be done in a shorter time. Shri P. S. Gowrishankar, SIAM, explained that the vehicles covered in the scope of the standard will also have to meet the requirements as stipulated in AIS-180, which was adopted earlier and that the lead time for implementation of both standards is grouped together.

Committee noted the information and adopted the proposed standard and agreed to put up the proposed time line for implementation of the standard to MoRTH for consideration.

**VII. AIS 182 ISOFIX Anchorage Systems:**

Shri A.A. Badusha, ARAI, presented details of the standard AIS 182 which covers requirements for ISOFIX anchorage systems meant to be fitted on M1 category of vehicles. The standard is based on UN R 145. Various tests viz., forward direction force test, oblique direction force test and test for i-size seating position were highlighted. Committee was requested to adopt the proposed standard and a lead-time of 1 year from final notification for new models and 2 years for existing models, on if fitted basis, was proposed for consideration.

Chairman sought clarity on the proposal to implement the standard on 'if fitted' basis and not making the same mandatory. Shri Gururaj Ravi, SIAM, Panel Convener and Shri Anil Kumar C., SIAM and Panel Convenor crash standards, informed that it is an optional provision for child restraint systems and that primarily seat belts are used for the purpose. The standard will enable the manufacturers to get their fitment tested if provided by them optionally.

Committee noted the information and adopted the proposed standard and agreed to put up the proposed time line for implementation of the standard to MoRTH or consideration.

**VIII. AIS 184 Driver Drowsiness and Attention Systems:**

Shri A.A. Badusha, ARAI, presented details of the standard AIS 184 on driver drowsiness and attention systems which covers vehicles of category M, N2 and N3. N1 category is excluded considering their usage pattern in India. The standard is based on European Regulation EU 2021/1341. It was highlighted that the standard uses Karolinska Sleepiness Scale (KSS) for assessment and alternatively covers methods such as PERCLOSE (percentage of eye closure) and EEG (electroencephalogram). Upon sleepiness detection, system alerts driver by audio-visual or haptic alarm linked with KSS. Various means such as Cabin Cameras, Lane detection and vehicle state monitoring are used for identifying drowsiness. The minimum sensitivity requirement is 40 percent. Committee was requested to adopt the proposed standard and was informed that the standard is proposed to be implemented on if fitted basis with a lead time of twelve months from the date of notification.

Committee deliberated on the need for putting up a regulation for a system for which the sensitivity is presently low. Shri K. C. Sharma, raised the concern of false alarms considering the low sensitivity of the systems which may impact the long-term implementation plan of the standard. Shri C. V. Raman and Shri Alok Jaitley, SIAM, supported Shri Sharma's views. Prof. Anoop Chawla, IIT

Delhi, submitted that not much studies have been carried out in Indian context on such systems and that the standard may be deferred until relevant data is available. Shri Rajendra Khile, SIAM, informed that the provisions in the standard are taken from European Regulation and even though the sensitivity of the systems as prescribed in the standard are low the evaluation of systems on the basis of an established procedure will provide an opportunity to improve the standard further. Shri Saurabh Dalela, Director ICAT, submitted that considering the Indian driving conditions and India specific driver duty hours it may not be appropriate to adopt the European provisions as it is. Shri K. K. Kapila, IRF, supported the adoption of the standard and expressed that with the availability of data, the standard can always be improved upon in future. Secretariat informed that during panel discussions, system suppliers had informed that such systems are already in use by some fleet operators and that the standard will provide an opportunity for evaluation of the existing systems and also enabling generation of requisite data to further work. Shri P. S. Gowrishankar, SIAM, expressed that the standard on an “if fitted” basis will provide an opportunity for benchmarking of existing systems and that the sensitivity of the system will improve over time with improvement in technology and learnings. Chairman expressed that besides over speeding, driver drowsiness is an important factor in road accidents and that the standard addresses an important safety issue. He highlighted that though the sensitivity of the system is low presently, but with the implementation of the standard on if fitted basis, it will provide an opportunity to all concerned stakeholders to further build upon the reliability of the system.

After detailed deliberations, Committee agreed to adopt the proposed standard and to put up the proposed time line for implementation of the standard to MoRTH for consideration.

**IX. AIS 186 Blind Spot Information Systems (BSIS):**

Shri A.A. Badusha, ARAI, presented details of the standard AIS 186 which is based on UN R 151. The standard covers requirement for Blind Spot Information Systems (BSIS) for vehicles of categories M2, M3, N2 and N3. BSIS is a driver assistance system to avoid collisions between turning vehicles and vulnerable road users (VRU) at low speeds. The standard prescribes various tests such as detection of blind spot; optical failure warning signal; blind spot information dynamic test; blind spot information static test; failure of detection test and automatic deactivation test. Upon detection of cyclist in risk zone (proximity) while turning maneuvers, system alerts driver by audio-visual alarm. Committee was requested to adopt the proposed standard with a lead time of twelve months from the date of final notification for implementation on “if fitted” basis.

Committee noted the information and adopted the proposed standard and agreed to put up the proposed time line for implementation of the standard to

MoRTH for consideration.

**X. AIS 187 Moving Off Information Systems (MOIS):**

Shri A.A. Badusha, ARAI, presented details of the standard AIS 187 which covers requirements for vehicles of categories M2, M3, N2 and N3 fitted with Moving Off Information Systems (MOIS). The standard is based on UN R 159. MOIS alerts driver by giving an audio-visual alarm upon detection of bicyclist and pedestrian in risk zone (proximity) during straight maneuvers from stand still position. Various tests as prescribed in the standard to evaluate the system were highlighted.

Committee was requested to adopt the proposed standard with a lead time of twelve months from the date of final notification for implementation on “if fitted” basis.

Committee noted the information and adopted the proposed standard and agreed to put up the proposed time line for implementation of the standard to MoRTH for consideration.

**XI. AIS-189 Cyber Security and AIS-190 Software Update:**

Shri A.A. Badusha, ARAI, presented details of the standard AIS 189 (Cyber Security) and AIS 190 which are based on UN R 155 and UN R 156 respectively. Scope of the AIS 189 standard covers vehicle of categories M, N, T category if fitted with at least one ECU and L7 if it is with level 3 and above autonomous driving features. AIS 190 covers requirements for evaluation of over the air software update for vehicle of categories M, N, T, A and C. The salient features of the standard were presented to the committee and a phase wise implementation plan for both standards was presented.

Shri K. C. Sharma, MoRTH, expressed that the AIS standards are based on UN Regulations and that experts from India participate in deliberations on formulation of various UN Regulations and therefore are aware of the provisions to be implemented. Considering the same the proposed timelines appear to be relaxed and can be shortened. Shri Alok Jaitley, SIAM, informed that for implementation of provisions of AIS-189 and AIS-190, manufacturers will have to start planning from design stage and that it should not be considered as an additional over the board fitment. Also, for autonomous vehicles wherein the compliance to these standards would be necessary, strict time lines are proposed. Shri Rajendra Khile, SIAM, expressed that more lead time is sought only for vehicles which are not envisaged to be under cyber threats. Prof. Chawla, IIT Delhi, supported industry’s views on the subject.

Chairman expressed that the cyber security is an important subject and that all concerned should prepare themselves in time so as to mitigate the potential threats. He expressed that though the proposed timelines and SIAM’s views are

noted considering the complexity involved in implementation of the two standards, stakeholders may put in more focused efforts to implement the standards with a lesser lead-time.

After due deliberation Committee adopted the proposed standards. The proposed timelines will be reviewed by MoRTH.

**XII. AIS 193 Automotive Vehicles – Steering effort – Method of evaluation:**

Shri A.A. Badusha, ARAI, presented details of the standard AIS 193 which covers the requirements for evaluation of steering system of vehicle of categories M, N and T. The standard is based on UN R 79. It was informed that AIS 193 is the next level revision of IS 11948:2010 and as compared to the previous version the new standard includes requirements for Automatically Commanded Steering function (ACSF) features. ACSF actuates the steering system automatically by evaluating signals possibly in conjunction with passive infrastructure features, to generate continuous control action in order to assist the driver in maintaining a desired lane. Different types of ACSF viz., A, B1, B2, C, D and E were explained. It was highlighted that vehicles with A type ACSF which operates at a speed of less than or equal to 10 km/h for assistance in low speed or parking maneuvering are already available in India and that the standard can be used to evaluate such features or other types of ACSF when provided in future. Committee was requested to adopt the proposed standard and deliberate on a lead time for implementation.

Committee noted the information and adopted the proposed standard.

**XIII. AIS 194 Specific Exemptions for Armoured Vehicles:**

Shri A.A. Badusha, ARAI, highlighted that Armoured Vehicles are special purpose vehicles and because of their nature of use are unable to meet certain CMVR requirements. Earlier the exemptions to such vehicles were given on case to case basis and therefore to streamline the approval procedure it was decided to formulate AIS 194 which shall specifically cover the exemptions granted. The standard is applicable to M and N Category armoured vehicles. Further it was informed that the standard was notified vide G.S.R. 863(E), dated 1<sup>st</sup> Dec 2022 and certain exemptions as allowed in the standard were highlighted. Committee was requested to ratify adoption and implementation of the standard.

Committee noted the information and adopted the proposed standard.

**XIV. AIS 001 (Part 1) (Rev.2) and AIS 002 (Part 1) (Rev.2):**

Shri A.A. Badusha, ARAI, presented details of the standard AIS-001 (Part 1) (Rev.2) and AIS-002 (Part 1) (Rev.2) which covers the performance requirements for indirect vision devices and their installation requirements.



The standards are based on UN R 46.

Committee was apprised of the additions in the revised standard which include modification and addition of new definitions for clarity and inclusion of technological advancements, elaborative requirements for Camera - Monitor System (CMS) as an option and modification in condition / installation requirements for N1 and N3 categories of vehicles, with respect to Class IV to VI devices. It was highlighted that present CMV Rules specifies the term “Rear View Mirror” only which would be required to be replaced with “Indirect Vision Devices” to enable new technologies such as CMS to be provided as an option for Mirrors. Committee was requested to adopt the proposed standard with a lead time of eighteen months from the date of notification for implementation.

Shri Raju M, SIAM, requested Chairman to direct test agencies to issue type approvals based on the adopted standard considering that the notification for implementation of the revised standard may take additional time. Shri Nishant, SIAM, requested that the Committee may grant permission to test agencies to issue type approval certificates based on today’s discussions on adoption of the standard and that the proposed technology is an advanced way forward which manufacturers would like to introduce as soon as possible. Shri A. A. Badusha, submitted that test agencies will be able to issue a type approval only on availability of the notification. However, test report can be issued by test agencies after verifying compliance as per the revised standard. Chairman informed that the urgency for having the necessary administrative arrangements for approval as per revised standard is noted. Also, it is noted that necessary changes in CMVR may be a prerequisite before issuing type approvals and that Ministry will review the subject along with test agencies, separately, if needed, to address the issue.

Committee noted the information and adopted the proposed standard and it was agreed to put up the proposed implementation plan to MoRTH for consideration.

**XV. AIS 178 Adapted Vehicles:**

Shri A.A. Badusha, ARAI, presented details of the standard AIS 178 which covers requirements for adapted vehicles of categories L1, L2, L5M and Tri-cycles. Presently the requirements are addressed through MoSRTTH resolution RT-11012/12/01-MVL for L1 and L2 category vehicles, MoRTH Advisory RT-11036/06/2019-MVL and ISO 10542 for L5M category vehicles. The various requirements are now collated in a single standard to facilitate the approval procedure. Additionally, IS 17154: 2019 and ISO 7176 are referred for requirements related to Tri-cycles. The standard specifies approval procedure of adapted vehicles and retro fitment / adaption kit, types of physical disabilities that can be considered, provisions related to wheelchair accessibility and requirements for detachable tricycles including requirements

for joining and separation arrangement. Further, compliance as per AIS 156 / AIS 038 (Rev. 2) is specified for Rechargeable Electric Energy Storage Systems. Committee was requested to adopt the proposed standard with a lead time of twelve months for implementation from the date of notification and was informed that tricycle manufacturers have requested to exempt detachable tricycle combination from registration and driving license.

Committee noted the information. Shri K. C. Sharma, expressed that considering the vulnerability of such vehicles in high speed manoeuvrability, a speed limit may be specified. Shri Jitendra Patil, Additional Transport Commissioner Maharashtra, informed that Motor Vehicle Act prescribes speed limits for adapted vehicles which may be referred to. Chairman highlighted Government's focus on providing accessibility to all and in this endeavour have issued notifications for various administrative requirements under CMVR for Divyangjans. Further, with respect to exemption from registration and driving license for tricycles, Chairman requested AISC to deliberate further on the subject along with the speed limit requirements and submit the proposals for consideration. Shri Anil Chhikara, Dy. Commissioner, Delhi Transport Department, requested Chairman that while implementation of the proposed standard administrative provisions such as registration may also be looked into. He submitted that there are ambiguities in the adaptive vehicle domain which may be reviewed.

Committee agreed that the standard may be adopted in principle and that the necessary changes in the standard based on above inputs and further deliberations in AISC shall be taken up.

**XVI. AIS 183 Three Wheeled Moped of L1-1 Category:**

Shri A.A. Badusha, ARAI, presented details of the standard AIS 183 which addresses requirements for a new vehicle category viz., Three Wheeled Moped of L1-1 category. The standard is based on European Regulation EU 168/2013. It was highlighted that vehicle may be powered by any of the power sources such as Gasoline, Diesel and Electric powertrains. Safety requirements such as Anti-lock braking system (ABS) or Combined Braking System (CBS) and Automatic Headlamp On (AHO) or Day Time Running Lamp (DRL) are included. Vehicles with additional pedal assistance are excluded. It was informed that the proposed vehicle category due to its construction which includes three wheels offers more stability and it will be helpful for elderly people and physically disabled. Committee was requested to adopt the proposed standard with a lead time of twelve months from the date of notification. Shri K. K. Kapila, IRF, expressed that the new vehicle category may be introduced with only electric powertrain and that the need for having petrol or diesel powertrain for such vehicle may not be appropriate considering the environment issues. Chairman suggested that the standard may not necessarily mention the powertrain to address the issue.

Committee noted the information and adopted the proposed standard and it was agreed to put up the proposed implementation plan to MoRTH for consideration. Secretariat was requested to propose necessary changes with respect to powertrain as discussed.

**XVII. AIS 076 Vehicle Alarm Systems:**

Shri A.A. Badusha, ARAI, informed that AIS 076 on Vehicle Alarm Systems is published and notified on if fitted basis. The standard covers vehicle of categories M1 and N1. Considering the issue of vehicle theft, it is proposed to make fitment of immobilizer mandatory for vehicles of category M1 with a lead time of nine months from the date of notification.

Committee noted the information and agreed with the proposed mandatory fitment of immobilizers for M1 category.

**XVIII. Various amendments to AIS standards:**

Secretariat presented a list of amendments which are published after approval in AISC. It was informed that the list of these amendments along with their purpose were circulated along with agenda. Further, recently an Amendment 2 to AIS 129 is also published, subsequent to the circulation of the agenda for the meeting. The details are given in Annexure-IV. Committee noted that except for the amendment to AIS 150 wherein exemption to certain category of vehicles from the requirement of Electronic Stability Control is proposed, no comments are received. Shri K. C. Sharma, MoRTH, expressed that the amendment to AIS 150 includes exemption for School Buses which are derived from Type-1 buses from the ESC fitment requirement. He highlighted that school buses also ply on stretches on highways. Therefore a demarcation is not possible between a school bus strictly plying within city limits or plying on a highway. Hence ESC being an important safety element should not be exempted. Shri K. K. Kapila, IRF, endorsed Shri Sharma's views. Committee noted the concern and agreed not to adopt the amendment to AIS 150. MoRTH will notify the fitment of ESC for School buses with a considered time line. All other amendments as listed in Annexure-IV were adopted by the Committee.

Shri Jitendra Patil, Additional Transport Commissioner Maharashtra, submitted that directions may be given to address requirements with respect to vehicles used for school children other than those specified in school bus standard, for example school vans. Chairman requested Secretariat to note the issue and initiate discussions on the subject in appropriate panel.

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

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

Secretariat informed that Draft notification G.S.R 180 (E) dated 13<sup>th</sup> March 2023 is published as per the action point under the agenda item. Shri K. C. Sharma, MoRTH, informed that period of submitting comments is over and the final notification is under process at MoRTH. Committee noted the information.

(ii) **Level playing field for OEMs and body builders of trucks and buses :**

Secretariat informed that following steps have been taken by Ministry to align the requirements for both OEMs as well as bus body builders.

- a) Fire Detection and Alarm Systems, Fire Suppression Systems and Fire protection systems is mandated for buses built by both OEMs and Bus body builders.

It was highlighted that as per the provisions in CMVR which provides for self-certification by bus body builders the compliance report for the following important items are to be enclosed by bus body builders, but are not mandatorily verified by test agency:

- b) Body Structure Strength and stability
- c) Windscreen Wiping system and driver field of vision
- d) Door hinges and door handles
- e) Electric Cables, fuses, terminals and connectors, Electrical Circuit Safety

Shri P. K. Banerjee, SIAM, presented SIAM's views on the subject. His presentation is attached as **Annexure-V**. He highlighted the disparity between the compliance mechanism for OEMs and non-OEMs and expressed that there are three focus areas viz., uniform regulations, information to be made available for registration and enforcement of rules on field. He appreciated Ministry's step taken with regard to the bringing uniformity in applicability of fire detection and suppression systems (FDAS/FDSS) and fire suppression systems (FPS) for buses built by both OEMs and non-OEMs. However, further steps need to be taken in the three areas as mentioned above to make OEM products financially viable for customers. Mr. Sushant Naik, SIAM, highlighted that the focus of safety of occupants is paramount and with disparities in regulations and the provisions for seeking registration the benefit of safety technologies is not realized on ground. Shri K. C. Sharma, MoRTH, informed as per the directions of the Honourable Minister, Road Transport and Highways, the evaluation parameters and evaluation mechanism for buses will be made uniform for both OEMs as well as Bus Body Builders.

Committee noted the information.

**(iii) Three wheeled Agricultural Tractors:**

Shri Amit Karwal, presented an update on the subject. His presentation is attached as Annexure-VI. He highlighted the need for amendments to definitions of Agricultural Tractors in Central Motor Vehicle Rules as well as the need for formulating a new standard to address vehicle level test which are specific to three wheeled agricultural tractors. Committee noted the information and directed technical panel to deliberate on the subject, and requested AISC to monitor the progress and to present the finalized proposal in the form of a standard for consideration of the Committee.

**(iv) Provisions of accessories on Agricultural Tractors to facilitate braking and functioning of light and light signaling devices on trailer:**

Secretariat informed that in the last meeting committee requested AISC to review the proposal put up by TMA on the subject. In the 68<sup>th</sup> meeting of AISC, committee agreed with the recommendation of TMA with a condition that accessories may be provided as an option for agricultural trailer manufacturer who are willing to provide light and light signaling devices, on their trailers as per AIS-112. Additionally, AISC agreed that in the absence of mandatory requirement for agricultural trailer brakes, trailer brake provisions on agricultural tractors may be amended. Shri Philip Koshy, TMA, requested the Committee to endorse AISC recommendations. Committee noted the submissions and agreed that the provisions may be amended in CMVR from “mandatory” to “if fitted” basis and requested TMA to ensure availability of the devices at dealer end for trailer manufacturers who wish to provide trailer braking and light and light signaling devices as per the standards. Secretariat was requested to submit the proposal to the Ministry.

**5.0 Report from AISC on Running Subjects :**

Secretariat presented a list of subjects under discussion in AISC along with their estimated time of completion. The presentation is attached as Annexure-VII. It was highlighted that subjects such as revised standards on light and light signaling devices and AEBS for M1 and N1 category vehicles are expected to be concluded by next meeting of AISC and that deliberations on key subjects such as revision of crash standards, lane departure warning systems, event data recorder, etc., are at advanced stages. Further, AISC is deliberating on the implementation plan of various IS standards which are published by BIS and submitted to AISC for consideration.

Secretariat highlighted that AISC has concluded deliberations on two subjects viz., RRR (Reusability, Recoverability and Recyclability) requirements for vehicles and

need for an amendment to CMVR 95 A (2) to bring clarity on tyre rim sizes. These subjects may be deliberated by the Committee for deciding a way forward.

**a. RRR requirements for vehicles:**

Secretariat informed that AIS 129 covers RRR requirements to be met by vehicle manufacturers. It was highlighted that norms with respect to vehicle scrappage centers which are also addressed in Part 1 of AIS 129 are put in place and that there is a need for notifying RRR requirements in CMVR. The timelines as discussed in AISC i.e. 18 months for L1, L2 and M1 category vehicles and 42 months for all other L, M and N category vehicles were presented to the Committee for consideration. Also, it was submitted that these requirements will only be applicable for new models. Shri Shrikant Deshmukh, SIAM and Panel Convener AIS-129, presented the rationale behind the proposed timelines. His presentation is attached as Annexure-VIII. He informed that requirements for vehicle categories other than L1, L2 and M1 have been recently finalized and accordingly additional lead time is proposed for these vehicle categories. Shri K. C. Sharma, MoRTH, expressed that meeting RRR requirements for other than L1, L2 and M1 category vehicles should not be an issue and that the proposed timeline of 42 months appears to be too relaxed. Shri P. S. Gowrishankar, SIAM, expressed that apart from the RRR requirements, the use of heavy metals too needs to be restricted and that OEMs will need to involve all vendors in the development cycle and therefore would require an additional time. Shri Deshmukh, highlighted that internationally only M1 category vehicles are covered under the RRR regime and India has taken a step forward by introducing the requirements for other category vehicles as well and that an additional lead time will facilitate a smooth implementation. Chairman expressed that the subject of circular economy is an important agenda item of the Government of India and there is a possibility of receiving directions to speed up the process. Considering the same Ministry may come up with shorter lead time and requested the stakeholders to prepare accordingly. Committee agreed to notify the RRR requirements as stipulated in the standard for new models and that Ministry will review the timelines.

**b. Tyre - Rim Combination for Agricultural Tractors:**

Shri Philip Koshy, TMA, informed that type approval certificate as per CMVR is taken by agricultural tractor manufacturers from test agencies notified under CMVR. Additionally, agricultural tractors have to comply with requirements of IS 12207, for becoming eligible for subsidy provided by Ministry of Agriculture. This certification is done at CFMTTI, Budani. Shri Koshy explained that for tyre rims IS

13254 which consists of list of rim sizes that can be used is cross referred in IS 12207. He highlighted that IS 13254 specifies both the recommended as well as the permitted rim size. He informed that CFMTTI insists only on recommended rim size to grant approval based on the wordings of the CMVR rule 95 A (2) - “The agricultural tractor manufacturer shall select only that rim size as recommended by the tyre manufacturer” and therefore there is need to address this ambiguity. Committee noted the information and agreed to amend the CMVR rule 95 A (2) suitably to address the issue.

**c. Safety Standards for Hydrogen:**

Committee further deliberated on development on safety standard for hydrogen internal combustion engine vehicles. Secretariat informed that the technical panel working on the new standard has completed its work and has submitted the finalized draft to the Secretariat which will be taken up for approval in the next meeting of AISC. However, considering the importance of the subject the Committee may deliberate on adoption of the standard directly by CMVR-TSC. Shri K. C. Sharma, MoRTH and Shri P. K. Banerjee, endorsed the view. Committee noted the information and agreed to adopt AIS-195 on the subject.

Committee noted the information on the work done under AISC and emphasized the need for completing the subjects on time.

**6.0 Finalized Draft AIS (hosted on MoRTH Website) :**

Secretariat informed that the standards adopted in the last meeting of CMVR-TSC were hosted on MoRTH website to seek comments from public at large and were subsequently published by the AISC Secretariat. Additionally, three standard which are adopted earlier in the day viz., AIS 001 (Part 1) (Rev.2) (Devices for Indirect Vision - Specifications), AIS 002 (Part 1) (Rev.2) (Devices for Indirect Vision - Installation) and AIS 184 (Driver Drowsiness) were hosted on MoRTH website considering the need for the standard from stakeholders. Secretariat submitted that as no comments were received on these three standards and now they are also adopted by the Committee, these standards may be taken up for publication. Committee noted the information and agreed with the proposed action plan.

**7.0 Report from BIS :**

Secretariat informed that BIS has submitted a list of additional standards published, to AISC, for preparing an implementation plan for the same. The list will be taken up for discussion in the next meeting of AISC. Further, the implementation plan for various IS standard was approved in the last meeting of CMVR-TSC and the notification for these standards is in process at MoRTH.

Secretariat highlighted the concern with respect to the older version of the IS

standard getting removed from BIS website whereas it is still referred to in CMVR. Secretariat informed that once a revised IS standard is published, the implementation plan for the same is discussed in AISC and CMVR-TSC and subsequently a notification is issued by MoRTH. Since this process takes time and also considering the lead time required for implementation of the revised standard a concurrent running of both the new and old version of the standard is required. Shri Sharad Kumar, BIS, informed that while issuing the Gazette notification on publishing of BIS standard such timelines are mentioned and BIS may be informed of the requisite timeline for specific standards which can be mentioned in the Gazette notification. Committee noted the information and requested BIS to consult with AISC / CMVR-TSC secretariat to decide the concurrent time of hosting both versions and that the consultation will address this practical issue.

#### **8.0 Review of Notifications :**

Secretariat presented a list of draft notifications published by MoRTH since the last meeting of CMVR-TSC and the list of subjects for which an implementation plan was agreed upon in the last meeting. The details are attached as Annexure-IX. Shri K.C. Sharma, MoRTH, presented an update on the draft notifications issued by MoRTH. He informed that based on the recommendations of the Ministry of Law, the notification on BNCAP is suitably worded and is under process at Ministry. Committee noted that the work is in progress on various subjects and that the notifications will be released in due course.

#### **9.0 New Subject for Discussion :**

Chairman highlighted that the new subjects on which work is proposed to be initiated are under discussion at various inter-ministerial forums and there is a need to address the subjects in a time bound manner and that the recommendations shall be supported with proper justifications and data which would be helpful in putting up an effective implementation plan. Shri K. C. Sharma, MoRTH, presented the need for initiating the work on the following new subjects.

- (i) **Pilot Study to evaluate the advantages of “5G” for automotive applications:**  
Shri Sharma highlighted the need for initiating a pilot study on evaluating the advantages of 5G in automotive applications. He proposed that the study can be initiated under the leadership of ARAI and any stakeholders who have already done such exercise may share their experience. Committee requested ARAI to put up a proposal in this regard and requested stakeholders to send their nominations to ARAI for working on the subject.



**(ii) Common receptacle for electric vehicle charging:**

Shri Sharma, highlighted that with increased thrust on e-mobility there is a need to facilitate charging of vehicles and an important element in this regard is to harmonize the charging receptacle. The objective is to eliminate the need for vehicle specific charging point for a vehicle and that the vehicle can be charged at any location. Committee noted the information and it was agreed that AISC may initiate the work on the subject.

**(iii) Caravan trailer pulled by vehicles:**

The need is to address requirements for caravan pulled by M1 category vehicles. Shri Sharma highlighted the need to address both the technical as well the administrative requirements such as parking, disposal of waste etc., while deliberating on the subject. Committee noted the information and it was agreed that technical panel on AIS-124 (requirements for Motor Caravans) shall initiate deliberations on the subject.

**(iv) Onboard weighment in commercial vehicles:**

It is proposed to formulate a new standard on onboard weighment of gross vehicle weight of commercial vehicle. Shri Sharma informed that European Regulation on the subject may be referred to and the key areas of deliberations would be ensuring temper proof fitment and calibration of the sensors. The onboard weighment will address the issue of over loading from user side and will provide a means for real time check on vehicle load during inspections on road by RTAs. Committee noted the information and it was agreed that a technical panel under AISC may initiate the work on the subject.

**(v) Hearse Van :**

Committee noted the social need for formulating a standard on Hearse Vans for facilitating their type approval and registration. AISC was requested to constitute a panel to formulate a new standard.

**10.0 Any Other Point :**

**a) Feracrylum 1% Gel :**

Shri Harjeet Singh, SIAM, highlighted the issues with respect to mandatory supply of feracrylum cream as part of the first aid kit. His presentation is attached as Annexure-X. He requested that Ministry may allow the industry

an additional time of four to six weeks to compile the data and other relevant information which can be used to decide the way forward. Chairman requested the industry to submit their observations at the earliest and that additional time of four to six weeks may not be practical. He assured that Ministry will review all submissions before issuing the final notification.

**b) Amendment to Onboard CNG Cylinder IS 15490 :**

Shri Gururaj Ravi, SIAM, presented the concerned with respect to meeting the requirements as specified in Amendment 1 to IS 15490. His presentation is attached as Annexure-XI. He informed that the amendment calls for additional test such as Hydrostatic Test Pressure and Burst Pressure of cylinder and specifies change in minimum wall thickness calculation of cylindrical shell. He submitted that cylinder manufacturers have shared their concern in meeting the new specifications which are to be complied with by June 2023. He informed that the concerns have been shared with BIS on the subject by cylinder suppliers. He requested the Committee to advise BIS to extend the date of implementation of the amendment by an additional year so as to allow cylinder manufacturers to complete the approval activity. Committee noted the information and requested Shri P. S. Shrikanth, BIS, to discuss the subject with the concerned department in BIS and share their views with Secretariat at the earliest. SIAM was also requested to share their submissions which have been made to BIS on the subject with Secretariat.

**c) Withdrawal of IS 3028 : 1998 from BIS Portal:**

Shri Alok Jaitley, SIAM, presented an update on the subject. His presentation is attached as Annexure-XII. He highlighted that IS 3028 on vehicle pass by noise measurement has been revised and BIS has removed the earlier version from their portal. The earlier version is still notified in CMVR and therefore poses a legal challenge. He requested the Committee to issue necessary directions to BIS to allow concurrent running of the two versions of IS 3028. Shri Gururaj Ravi, SIAM, informed that implementation plan for revised IS 3028 (Part 2) was discussed and it was agreed to propose the implementation of the standard from April 2027. In view of the same he proposed that two versions would need to run concurrently till 1<sup>st</sup> October 2027.

Committee noted the information. Chairman requested BIS representatives to take note of the practical difficulties faced in the regulatory framework with respect to keeping live the IS standards which continue to be notified under CMVR but are made obsolete by BIS upon availability of a revised version. He

requested BIS to revert back with an action plan and discuss with AISC / CMVR-TSC Secretariat to propose a way forward.

**d) SIAM submission on AIS 142 - Evaluation of Tyres with Regard to Rolling Sound Emissions and/or to Adhesion on Wet Surfaces and/or to Rolling Resistance :**

Shri Gururaj Ravi, SIAM, presented an update on the subject. His presentation is attached as Annexure-XIII. He informed that earlier AIS 142 was notified vide G.S.R 479 (E) dated 28<sup>th</sup> June 2022 and recently a draft notification G.S.R 232 (E) dated 28<sup>th</sup> March 2023 is issued which specifies modifications in the date of implementation of various requirements as per AIS 142. He highlighted the concern with respect to obtaining Type Approval Certificate in the interim period between the date of implementation specified in the earlier notification and the date of issue of final notification with revised dates. He requested Ministry to issue the final notification at the earliest. Shri A. A. Badusha, ARAI, explained that test agencies issue type approval certificates as per the rule as on date and considering the date of implementation as per the previous notification test agencies will have to take due cognizance while issuing the type approval certificate. He sought Ministry's views if the date as specified in the draft notification can be considered for issuing type approval certificate. Shri K. C. Sharma, informed the status of issue of final notification and the same will be issued at the earliest.

Shri A. A. Badusha, also highlighted the concern with respect to availability of calibrated test track at GARC for C1 category tyres and requested GARC to expedite the process of accreditation of test tracks at the earliest. Shri V. M. Dhanasekar, GARC, informed that the status of work on the subject will be shared with test agencies and Ministry at the earliest. Shri Manish Jaiswal, Director NATRAX informed that test tracks at NATRAX are calibrated and can be used by test agencies. Shri Sharma, submitted that all stakeholders need to work expeditiously to prepare and complete the testing work in time and that no further revisions in date of implementation will be allowed.

**e) Review of L1, L2 and L5 definitions in AIS/IS standards and CMVR :**

Shri K. C. Sharma, MoRTH, informed that it is brought to the notice of Ministry that definition of L1, L2 and L5 category of vehicles in AIS/IS standard and CMVR are not aligned and that needs to be addressed on priority. Committee requested Secretariat to review the subject and propose a way forward.

#### **11.0 Address by Hon'ble Minister, Road Transport and Highways:**

Hon'ble Minister Shri Nitin J Gadkari ji, congratulated the Committee for completing twenty-five years and acknowledged the work done by the members over the years. He presented the vision of increasing the size of the industry by two times as that of today. He encouraged the Industry to take proactive measures to adopt new technologies, enhance vehicular safety and reduce vehicular emissions.

Shri Mahmood Ahmed, Chairman CMVR-TSC and SCOE, thanked honorable Union Minister, Shri Nitin J Gadkari ji, for addressing the participants and guiding the automotive industry to meet the future aspirations.

Meeting ended with thanks to and from the Chair.

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