



BUREAU OF INDIAN STANDARDS

MINUTES

Name of the Committee	No. of Meeting	Date & Time	Day	Venue
Passive Safety Crash Protection Systems Sectional Committee, TED 29	16th	04/06/2024 & 10:30 AM	Tuesday	Virtual Meeting

CHAIRMAN: Shri Rahul Mahajan

MEMBER SECRETARY: Mr. G Ajit Kumar

HEAD (TED): Shri Deepak Kumar Aggarwal

Sl No.	Organizations	Members
1.	Automotive Research Association of India (Chairperson)	Shri Rahul Mahajan
2.	Ashok Leyland Limited, Chennai	Shri Faustino
3.	Association of State Road Transport Undertakings	Dr R.R.K. Kishore
4.	Autoliv India Private Limited, Gurugram	Shri Boobalan N
5.	Autoliv India Private Limited, Gurugram	Shri Sivakumar S
6.	Autoliv India Private Limited, Gurugram	Shri vijay shetty
7.	Automotive Component Manufactures Association of India	Shri Sanjay Tank
8.	Automotive Research Association of India, Pune	Shri Dileep Kulkarni
9.	Automotive Research Association of India, Pune	Shri Vishal Rawal
10.	Automotive Research Association of India, Pune	Shri B S Yamgar
11.	Automotive Research Association of India, Pune	Shri Santosh Chopde
12.	Bajaj Auto Limited, Pune	Shri Abhay Kumar
13.	Bajaj Auto Limited, Pune	Shri Parmeshwar Mane
14.	Central Institute of Road Transport, Pune	Shri Farukh Makhdoom,
15.	Denso International India Private Limited, Gurugram	Shri Lokesh Mittal_
16.	Honda Cars India Research and Development Limited, Noida	Shri Muthu Kumar
17.	Honda Cars India Research and Development Limited, Noida	Smt Neha Gaba
18.	Hyundai Motor India Engineering Private Limited, Hyderabad	Shri satya_hyundai
19.	International Centre of Automotive Technology, Manesar	Shri Ashish kumar
20.	International Centre of Automotive Technology, Manesar	Shri Sitikantha Padhy
21.	JP Research India Pvt Ltd, Pune	Shri Rohan Govardhan
22.	Mahindra and Mahindra Limited, Mumbai	Shri Praveen
23.	Mahindra and Mahindra Limited, Mumbai	Smt Pushpanajali
24.	Mahindra and Mahindra Limited, Mumbai	Shri Shailesh_Kulkarni
25.	Mahindra Trucks and Bus Division, Pune	Shri Amit Patil
26.	Mahindra Trucks and Bus Division, Pune	Shri V G Kulkarni
27.	Maruti Suzuki India Limited, Gurugram	Shri Arun Kumar
28.	Maruti Suzuki India Limited, Gurugram	Shri Gururaj Ravi

29.	Maruti Suzuki India Limited, Gurugram	Shri Sumit Kumar
30.	Renault Nissan Technology and Business Centre India Pvt Ltd.	Shri C V Girish Chandh
31.	Renault Nissan Technology and Business Centre India Pvt Ltd.	Shri Jebin Jowhar
32.	Renault Nissan Technology and Business Centre India Pvt Ltd.	Shri Rajendra Khile
33.	Renault Nissan Technology and Business Centre India Pvt Ltd.	Shri Sabarivasan K N
34.	Renault Nissan Technology and Business Centre India Pvt Ltd.	Shri Vivekraj.S
35.	Tata Motors Limited, Pune	Shri Ganesh Gadekar
36.	Tata Motors Limited, Pune	Shri Namrata Deb
37.	Tata Motors Limited, Pune	Shri Sagar Barve
38.	Tata Motors Limited, Pune	Shri Vinay Maurya
39.	Tata Motors Limited, Pune	Shri Atul Date
40.	Toyoda Gosei Minda, Gurugram	Shri Parthasarathy
41.	Toyota Boshoku Automotive India Private Limited, Gurugram	Shri Deepak MK
42.	Toyota Kirloskar Motor Private Limited, Bidadi	Shri Dinesh G M
43.	Aisin Automotive Haryana	Shri Ashish Yadav
44.	Aisin Automotive Haryana	Shri Ritik Kumar

ITEM 0 WELCOME ADDRESS

Opening Remark from Chairperson

Chairperson welcomed all the members who has attended the 16th Sectional Committee Meeting and also appreciated the contribution in the standardization activities of TED and Thanked TEDC for appointing him as chairperson to TED 29. He hoped that with every one co-operation and support we can continue the great work done by former chairperson Shri A mannikaar. He requested all the members to take active part in the deliberations on various issues which were discussed as per the agenda. He also requested all the members to complete the work allotted to them within stipulated time frame so that the work of TED 29 is complete as per the time lines set for those activities.

Opening Remark from Head (TED)

Head TED welcomed the new Chairperson and all the members who has attended 16th Sectional Committee Meeting. Head TED emphasized that safety has always been a top priority for all of us, hence TED 29 is a very important committee from the standpoint of the user or consumer. As TED 29 is the national mirror committee of ISO 22 SC 36, he advised all the members to review the ISO program of work and perform gap analysis with standards under TED 29 and adopt relevant ISO standards. He also explained about guidelines received from BIS Management like organizing frequent meetings, incorporation of Academia and Additional domain experts in standard formulation activities and also emphasized the importance of undertaking R&D projects for formulation of new standards or revision of existing standards.

ITEM 1 CONFIRMATION OF THE MINUTES OF LAST MEETING

The committee deliberated on the comments received on MoM and decided to incorporate the comment of MSIL and also approved the MoM of the 15th SC Meeting of TED 29.

ITEM 2 COMPOSITION OF THE SECTIONAL COMMITTEE

2.1 The committee noted the information as given in agenda

2.2 The committee noted the information as given in agenda

2.3 The committee deliberated on the composition and decided to withdraw the nominations of the members who has not attended 15th and 16th SC meeting of TED 29 as per PNC09/18/2023-PNC-BIS dated 05/09/2023.

2.4 The committee noted the information as given in agenda

2.5 The committee noted the information as given in agenda

ITEM 3 ISSUES ARISING OUT OF THE MINUTES OF THE LAST MEETING

A summary of actions taken on the Minutes of previous meetings of TED 29 along-with decisions taken by the Committee in the last Meeting is given below:

S N o	ITEM	Decision in previous meetings	Decision in the last meeting	Decision in 16 th Meeting
1	New Work Item Proposals.	Gender Neutral Standards for following 1. Airbags 2. Seat Belts	The committee deliberated and decided to form a Panel under the convenorship of Shri Rahul Mahajan, ARAI with following Members: <ul style="list-style-type: none"> • Autoliv • MSIL • JP Research • Tata Motors • ASRTU • ZF RANE • ARAI • M&M <p>The Panel is also advised to prepare a plan of action within 3 weeks and share with BIS.</p> <p>The committee also advised panel to prepare Terms of research (TOR) for above research project.</p>	The panel meeting of Gender-neutral restraining systems was held on 14/05/2024 and Minutes of meeting was enclosed in <i>Annex C</i> of agenda. The panel briefed the committee about the status of work on GNRS and also shared the future plan of action for draft preparation. The panel also informed the committee about workshop on GNRS which is planned at ARAI, Pune
2	SNAP (2022-2027)	The following are the new areas identified for development of Standards. 1. CRS in Buses 2. Safety Installations (Crash Barriers, Bollards) 3. Safety Critical components of vehicle 4. Transportation of Especially abled persons CRS in Buses The committee deliberated and decided to form a Panel under the convenorship of Shri M M Pathak, CIRT with following Members: <ul style="list-style-type: none"> • ARAI • Ashok Leyland • Mahindra Trucks and Buses • Tata Motors • ZF RANE <p>The Panel is also advised to prepare a plan of action within 3 weeks and share with BIS.</p>		CRS in Buses The 1 st panel meeting of CRS in school buses was held on 28/02/2024 and Minutes of meeting was enclosed in <i>Annex D</i> of agenda. The 2 nd panel meeting was held on 08/05/2024 and panel decided to adopt UN R 170 (see <i>Annex G</i> of agenda). Shri Farukh Makhdoom briefed the committee about the status of work on CRS in school buses and also informed the committee about

		<p>The committee also advised panel to prepare Terms of reference (TOR) for above research project.</p> <p>Crash barriers The committee deliberated and decided to form a Panel under the convenorship of Shri Sagar Bendre, NATRAX with following Members:</p> <ul style="list-style-type: none"> • ARAI • Ashok Leyland • Mahindra Trucks and Buses • Tata Motors • JP Research • Indian Road Congress • National Highway Institute <p>The Panel is also advised to prepare a plan of action within 3 weeks and share with BIS.</p> <p>The committee also advised panel to prepare Terms of research (TOR) for above research project.</p> <p>Transportation of Especially abled persons The committee deliberated and decided to adopt AIS 169.</p>		<p>workshop on CRS which is planned at ARAI, Pune</p> <p>The committee deliberated and decided to process the draft for WC for 60 days.</p> <p>Crash barriers BIS Civil Engineering Department is working on crash barriers. Hence the subject may be transferred to them and extend our support as and when required.</p> <p>The committee noted the information and decided to have a joint panel along with CED department for development of standard on crash barrier.</p> <p>Transportation of Especially abled persons The draft document (Conversion of AIS 169) is under WC. (see SI No 6 of Item 3)</p> <p>The committee noted the information.</p>
3	<p>Proposal for Draft Amendment 1 to IS 16904: 2018 Survival space for the protection of the occupants of the cab of a commercial vehicle</p>	<p>The Panel under the convenorship of Shri Sakthivelan S., Head - Homologation, Mahindra & Mahindra Ltd. conducted a meeting on 31st January 2023 and proposed a draft Amendment 1 to IS 16904</p>	<p>The committee deliberated and decide to process the document for WC for 60 days.</p> <p>Decision in 15th Meeting The committee authorized member secretary to process the draft to publication, if no comments were received during WC.</p>	<p>No comments were received during WC. Hence document was processed for publication.</p> <p>The committee noted the information.</p>
4	<p>Proposal for Adoption ISOs related to Child</p>	<p>Shri Dilip Kulkarni for ARAI proposed for Adoption ISOs related to Child Safety as Indian Standards stating the following reasons:</p>	<p>All the standards are under publication stage.</p>	

	<p>Safety as Indian Standards</p>	<p>Draft AIS182 is published which will lead to type approval of ISOFIX anchorage systems on if fitted basis in coming days. This draft AIS182 specifies several ISOFIX Child Restraint Fixtures (ISOFIX CRFs) required for installation checks. The original reference of these CRFs is given in ISO-1316 which is recently revised.</p> <p>In Indian context, we can convert this ISO-13216 into mirror IS so that the same can be referred while further converting Draft AIS182 into Indian Standard as well as have free access to ISO-13216 for future references.</p> <p>In addition, following ISOs related to Child Safety can be considered for ISO to IS conversion</p> <ul style="list-style-type: none"> • ISO 13218 Child restraint systems — Report form for accidents involving child passengers • ISO 13215 (part 1 to 3) Reduction of misuse • ISO 13216 (part 1 to 3) ISOFIX Standard – High Priority • ISO 29061 (part 1 to 4) Assessment of ISOFIX usability • ISO/TS 22239 (part 1 to 3) Child seat presence and orientation detection system (CPOD) • ISO/TR 14646 Side impact testing of child restraint systems — Review of background data and test methods • ISO 29062 Child restraint systems - Sled test method <p>Decision in 14th Meeting</p> <p>The Committee deliberated and decided to adopt all the 14 ISO standards and authorized Member Secretary of TED 29 to process all the documents for WC for 60 days.</p> <p>Decision in 15th Meeting</p> <p>Committee approved for processing the documents for publication.</p>		<p>The committee noted the information.</p>
<p>5</p>	<p>TED 29(19145): Amendment 2 to IS 14225:2017 Automotive vehicles - Locking systems and door retention components - General requirements (First Revision)</p>	<p>Decision in 13th Meeting</p> <p>Doc TED 29 (19145) The committee deliberated on the comment received from Ashok Leyland and decided to incorporate the comment.</p> <p>The committee also requested Shri Sanjay Tank to go through the standard for any further editorial changes and send the draft to BIS Secretariat within 30 days which can be processed</p>	<p>Doc TED 29 (19145)</p> <p>As requested by committee, Shri Sanjay Tank, ACMA had scrutinized the draft (see <i>Annex B</i>) the same was circulated among committee members for receipt of inputs.</p> <p>The committee deliberated on the findings of ACMA and requested ARAI and ACMA to have international deliberations and finalize the amendment which can be processed for WC for 30 days</p>	<p>The draft has been processed for publication. The committee noted the information.</p>

		<p>Doc TED 29 (19145) As requested by committee, Shri Sanjay Tank, ACMA had scrutinized the draft the same was circulated among committee members for receipt of inputs.</p> <p>No comments were received.</p> <p>The committee may please deliberate and approve for finalizing the documents and process it for publication.</p>	<p>and if no comments were received with in WC the same may be processed for publication.</p> <p>Decision in 15th Meeting:</p> <p>The committee deliberated and requested Shri Vishal Rawal and BIS secretariat to finalize the draft and process the document for publication.</p>	
6	<p>Technical Systems and Aids for Disabled or Handicapped Persons Wheelchair Tiedown And Occupant-Restraint Systems Part 1: Requirement s And Test Methods For All Systems</p>	<p>Decision in 12th meeting</p> <p>The committee after having rigorous deliberations finally decided to hold the further processing of Doc TED 29(19013) till further instructions from TED 29 Sectional Committee.</p> <p>Decision in 13th Meeting:</p> <p>For the Doc TED 29 (19013) the committee deliberated and decided to keep the stance same which is to hold the document till further instructions from TED 29 Sectional committee.</p>	<p>Decision in 14th Meeting:</p> <p>Doc TED 29 (19013) The committee reviewed and decided to drop the document TED 29 (19013) and to adopt AIS 169.The committee noted the information.</p> <p>Decision in 15th Meeting: The doc TED 29(19013) has been dropped and conversion of AIS 169 to Indian standard is under process.</p> <p>The committee authorized member secretary to process the draft to WC.</p>	<p>The draft is under WC.</p> <p>Comments were received from Ashok Leyland (see <i>Annex H of agenda</i>) and MSIL (see <i>Annex J of agenda</i>) and TML (see <i>Annex L of agenda</i>)</p> <p>The committee deliberated and decided to incorporate MSIL and TML comments.</p> <p>The committee advised Ashok Leyland to modify their comments as per scope of standards and send it to BIS Secretariat.</p> <p>The draft after incorporation of all the comments will be once again processed for WC for 30 days and authorized member secretary to process the draft for publication, if no further comments were received.</p>
7	<p>Proposal to Revise IS 15546</p>	<p>Decision in 13th Meeting</p> <p>The Panel Convenor Shri Gururaj Ravi had briefed</p>	<p>Decision in 15th Meeting:</p> <p>Draft Amendment has been received from MSIL and had been circulated among the</p>	<p>The amendment 2 to IS 15546 is under gazette stage.</p> <p>The committee noted the</p>

		<p>the committee about the changes incorporated in the revised draft.</p> <p>The panel informed the committee that for inclusion of luggage retention and whiplash requirement a detailed study and analysis need to be carried out for that sufficient time is required and the panel also informed the committee that they will update the status of developments in next subsequent sectional committee meetings.</p> <p>The Chairman advised the panel to include the requirements of Luggage retention as amendment 1 to existing IS-15546 standard. Whereas whiplash related requirements are getting evolved we can study them segregate and propose amendment at appropriate time.</p>	<p>committee members for receipt of inputs.</p> <p>Comment from ARAI i.e C1 - 5.4.2.8 on page no 11 of the standard there seems to be a typo error. Instead of 890 Nm it is supposed to be 890 N</p> <p>Decision in 15th Meeting:</p> <p>Committee approved for processing the documents for publication.</p>	<p>information.</p> <p>The committee also deliberated and decided to take up the implementation of luggage retention in CMVR in initial phase after publication of Amendment 2 to IS 15546 and in next phase whiplash requirements may be considered.</p>
8	<p>Proposal for Amendment 2 to IS 15901 : 2010 Automotive Vehicles – Bumper fitment on M1 Category of vehicles – Test methods</p>	<p>Decision in 12th Meeting:</p> <p>The committee decided to give 1 month duration for committee members for sharing their inputs and based on that draft will be processed for wide circulation for 30 days and if no comments were received on WC it will be processed for publication.</p> <p>Decision in 13th Meeting: Comments were received from MSIL & RNTBCI</p> <p>The committee deliberated on the comments received and decided to incorporate the comment received from MSIL in the Amendment.</p> <p>The committee also</p>	<p>Decision in 14th Meeting:</p> <p>Data pertaining to IS 15901 was received from Panel convenor.</p> <p>The committee also deliberated on the comments received from RNTBCI and decided to incorporate the comments and process the document for WC for 60 days</p> <p>Decision in 15th Meeting: The document is sent for WC. The committee noted the status and also authorized member secretary to process the document for publication if no comments were received during the WC duration.</p>	<p>The document is under publication stage.</p> <p>The committee noted the information.</p>

		deliberated on the comment received from RNTBCI and decided to form a panel under the convenorship of Shri Yamgar, ARAI to work on tolerance provision for Offset frontal crash by carrying Physical analysis or Computer Simulation analysis and put forth the panel recommendation in the next Sectional Committee meeting.		
9	Amendment 2 to IS 16694:2018	<p>Toyota Kirloskar Motor Pvt. Ltd. had proposed a Draft Amendment 2 to IS 16694:2018 which is inline with Amendment 6 to AIS 145:2018</p> <p>Decision in 14th Meeting:</p> <p>Comments were received from TML and MSIL</p> <p>The committee deliberated on the comments received from TML and MSIL and decided to incorporate the comments in the draft and process the draft for wc.</p>	<p>Decision in 15th Meeting:</p> <p>The document has completed WC duration and no comments were received during WC.</p> <p>During the 15th meeting M&M has raised an objection over publication of amendment, The committee deliberated and decided to take up the issue with BIS Management.</p>	<p>The BIS Management engaged in deliberation and subsequently determined that, due to its status as a safety critical component, the decision regarding the publication or retention of the amendment should be referred to the Technical Committee.</p> <p>The committee deliberated and decided to processing the draft for publication.</p>
10	<p>IS 11939: 1996</p> <p>Automotive vehicles - Steering control systems - Impact protection requirements and methods of measurement (First Revision)</p> <p>Panel Convenor Shri B S Yamgar</p>	<p>The committee decided to form a panel under the convenorship of Shri B S Yamgar to finalize the draft with in duration of 2 months and sent it to BIS secretariat for processing the document for wide circulation.</p> <p>The panel convenor sent the draft standard to BIS secretariat on 15/12/22 and it was circulated among the committee members and one comment was received from BAL on 19/12/22.</p> <p>Representative from BAL and TML had briefed their comments to the committee on draft revision to IS 11939. The committee requested the Panel under convenorship of Shri</p>	<p>The Final draft was received from ARAI and circulated among the members for receipt of inputs</p> <p>Comments were received from MSIL and TML</p> <p>The updated draft after incorporating the comments were circulated among the members.</p> <p>The committee deliberated and decided to process the document for WC for 60 days</p>	<p>The document is under WC.</p> <p>Comments were received from RNTBCI (see Annex K of agenda) and M&M (see Annex M of agenda)</p> <p>Committee deliberated and decided to take up the comments in the panel under convenorship of Shri Yamgar and advised panel to submit their recommendation to BIS Secretariat within 30 days.</p> <p>The draft after incorporation of all the comments will be once again processed for WC for 30 days and authorized member secretary to process the</p>

	Yamgar to deliberate on the comments received and modify the draft accordingly and sent it to BIS secretariat at the earliest.	draft for publication, if no further comments were received.
11	Presentation by Shri Boobalan from M/s. Autoliv on 2 Wheelers Safety The committee appreciated the detailed presentation by M/s. Autoliv on 2 Wheelers Safety and advised M/s. Autoliv to form a panel to work on standardization in field of 2 wheeler safety.	

ITEM 4 REVIEW OF INDIAN STANDARDS

IS Number	Decision in Last Meeting	Decision in 16 th meeting
IS 13749 : 2009	Automotive vehicles - Procedure for determining the "H" point and the torso angle for 50th percentile adult male in seating positions of motor vehicles	During the meeting ARAI recommended for Reaffirmation. Committee advised Shri Dilip Kulkarni to send detailed justification for reaffirmation vide email to BIS secretariat within 30 days.
IS 15901 : 2010	Automotive Vehicles bumper Fitment On-M1 Category of Vehicles Test Methods.	The committee deliberated and decided to assign the standard to reaffirm this standard as all the latest upgradation is included in Amendment 2 to IS 15901 which is under publication stage.
IS 12009 : 1995	Automotive vehicle - Safety requirements for side door of passenger cars - Recommendations (First Revision)	The committee deliberated and decided to assign the standard to BAL to carry out the review.

ITEM 5 INTERNATIONAL ACTIVITIES

The committee noted the information given in the agenda and decided to adopt ISO 6487 and advised all the committee members to recommend the standards under ISO TC 22 SC 36 which can be adopted as Indian standard.

ITEM 6 MEETING CALENDAR FOR THE YEAR 2024-25

Meetings	Tentative Date
17th Sectional Committee Meeting	25/09/2024
18th Sectional Committee Meeting	20/12/2024
19th Sectional Committee Meeting	07/03/2025

The committee approved the meeting calendar.

ITEM 7 ANY OTHER BUSINESS

Chairman has briefed the committee regarding request received from TEDC chair i.e Regarding exploring the possibility of CAE certification of seat belt anchorages. The committee deliberated and decided to form a panel under the convenorship of TED 29 Chairperson to work on exploring the possibility of CAE certification of seat belt anchorages.

There being no other comments/proposals, the meeting ended with a vote of thanks by the Chair.