

For BIS use only

BUREAU OF INDIAN STANDARDS

AGENDA

Name of the Committee	No. of Meeting	Date and Time	Day	VENUE
Automotive Electrical Equipment and Instruments Sectional Committee, TED 11	Thirty-second (32nd)	27.9.2024	Friday	College of Engineering Pune
Name of the Committee	No. of Meeting	Date and Time	Day	Meeting link/Venue
Automotive Electrical Equipment and Instruments Sectional Committee, TED 11	Thirty-second (32 nd)	XXX September 2024 at XXXX am	XXXXXX	

CHAIRMAN: Shri G R M Rao (VRDE, DRDO)

HEAD (TED): Shri A P D Dwivedi **MEMBER SECRETARY:** August Dubey

ITEM 0 WELCOME AND INTRODUCTORY REMARKS

0.1 Welcome Remarks by Head (TED)

0.2 Opening Remarks by the Chairman

ITEM 1 CONFIRMATION OF THE MINUTES OF LAST MEETING

The minutes of the last meeting (31st meeting) of Sectional Committee TED 11, held on 3rd May 2024 in virtual mode, was circulated vide BIS Portal 30.05.2024. Members were requested to send their comments on recording of the proceeding. We have not received any comments regarding decision of the committee till date.

The Committee may Confirm the minutes of the meeting.

ITEM 2 COMPOSITION OF THE SECTIONAL COMMITTEE

2.1 As a matter of policy, the sectional committees are to be reconstituted every three years.

The policy guidelines are:

- a) Efforts shall be made to keep the strength of committee optimum;
- b) Withdraw the nomination of the organizations who are continuing for long periods but are neither attending the committee meetings for the last three or more years nor contributing through correspondence/ mail;
- c) Co-opt the new members and organizations whose inclusion will be helpful in the committee's work or which are capable of contributing in emerging new technologies and new areas of work;
- d) Strength of the manufacturers should be restricted to 1/3rd of the total strength of the technical committee; and
- e) NGOs where ever possible should also be co-opted.

The committee may please note.

2.2 The following directions have been received from the Competent Authority of the Bureau for reviewing the composition of the Sectional Committee:

- a) Major Government purchasing organizations are to be given representation in the committees wherever applicable.
- b) The continuation of committee membership, including those represented in individual capacity, is to be considered on the basis of past attendance and contribution.
- c) In case representative of the concerned organization is not attending the meeting regularly or not contributing even by correspondence, the organization may be requested to substitute their member.
- d) Efforts should be made to include representative of different product segments as per the scope of the committee.
- e) Increased involvement of premier institutions like IIT, CSIR labs, IISc and other R & D organizations to be worked out.
- f) **Efforts should be made to include young professionals and scientist in the Committee.**

The committee may please note.

2.3 Based on above guidelines the committee may review the present composition of the Committee given in **ANNEXURE 1**. The list shows the status of committee members as manufacturer, consumer, R&D etc. and also attendance of the members in the last three consecutive meeting.

2.4. CO-OPTION IN TED 11 COMMITTEE

2.4.1 In 31st meeting, committee had decided to co-opt following organization, status is as follows:

Sl No	Nomination	Organization	Status
1	Shri Subrat Kumar	Ola Technologies Private Limited	Nomination Updated
2	Shri K N Hemanth Kumar	International Association Copper India, Mumbai	Nomination updated

2.4.2 Following new, co-option request is received for TED 11 Committee:

Sl No	Nomination	Organization	Remarks
1)	Shri Aarul Jain	Synopsys India Pvt Ltd	Details circulated vide BIS portal on 13.9.2024
2)	Shri Shiva Kiran A R	Bosch Limited, Bengaluru	Details circulated vide BIS portal on 13.9.2024
3)	Shri Vijaykumar Vaghasiya	Qualcomm India Private Limited, Bengaluru	Details circulated vide BIS portal on 13.9.2024
4)	Shri Sujeet Gaikwad	Hella India Automotive Private Limited, Gurugram	Details circulated vide BIS portal on 13.9.2024

2.4.3 In 31st, meeting Committee deliberated and rejected the Co-option request of APTIV. It mentioned that as ACMA is already a member in TED 11 committee and APTIV is member of ACMA, it may contribute in standardization process through ACMA.

In reference to above, following mail is received from ACMA:

As discussed with you, We (ACMA) would like to put up the request of M/S Aptive to register Mr. Chagari (profile given in the attached letter) with BIS (TED11) for his involvement in ISO 26263 as a Member of ACMA.

Though their earlier request to get included in the TED11 SC was not approved, we once again request you to reconsider, if possible. Else, please consider their request to get registered in ISO 26263 , as representative from ACMA.

Committee may please deliberate.

2.5 The Committee may suggest means for identification and involvement of talent available in

the country related to the subject dealt by the committee and methodology to involve them in the proceedings of the Committee. The Committee may also suggest means and ways to enhance the participation of the members in Committee work through participation in the meeting or sending comments on the documents.

2.6 Panel constituted under TED 11 are as follows:

Panel No.	Composition	Remarks
Panel 1	Panel convenor- Shri Gururaj Ravi Composition- Representative from ARAI CIRT ICAT SIAM vehicle manufacturers in TED 11 committee ACMA	Scope: To deliberate on All Horn related standards and comments received thereon and provide its recommendation to the committee.
Panel 2	Convenor- From Hero Moto corp Composition- Experts from ACMA SIAM ARAI ICAT	Scope: To deliberate on comments received on draft document TED/11/23215
Panel 3	Convenor: From Renault Members: Experts from LEAR MAHINDRA MSIL	Scope: To prepare the draft documents based on AIS 189 and AIS 190, and submit to BIS within 1 month after publication of AIS 189 and AIS 190.
Panel 4	Panel convenor: BIS may decide in Consultation with Chair Members: Experts from HMSI MSIL UNO Minda Hero Motocorp Lear BAL	Panel 4- For ISO TC 22 SC 32 Panel 5- For ISO TC 22 SC 35 Reviewing the ISO standard and segregating them in following category: ISO Standards which can be directly adopted as Indian Standards without any change. ISO standards which can be modified technically as per our country's needs and then adopted as Indian Standards.
Panel 5	Convenor: From Renault Members: Experts from MSIL HERO MOTOCORP	

	(Others may submit their nomination for panel within 14 days)	ISO Standards which are not at all suitable for our country needs and may not be adopted at all.
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ARAI vide mail dt. 25.7.2024, recommended to consider testing agencies nominations in all the panels of TED 11.

Committee may deliberate.

ITEM 3 ISSUES ARISING OUT OF ACTIONS OF THE PREVIOUS MEETINGS

Sr No	Subject	Decision taken in previous meeting	Present Status
1.	Indian Standard based on AIS 198, AIS 199 and AIS 200 'Retro-reflective markings — Retro-reflective markings for vehicles, their trailers and semi-trailers — Specification' (Adoption of AIS 090:2019)	<p>32nd Meeting Status: ARAI may please update.</p> <p>32nd Meeting Decision: Ms Jyoti from ARAI informed that AIS 198, AIS 199 and AIS 200 have been finalized by AISC and adopted by CMVR-TSC during its last meeting, however the minutes of CMVR-TSC meeting was awaited.</p> <p>Committee deliberated and decided to drop the documents for formulation of Indian Standards based on AIS 89, AIS 90 and AIS 91. Further, the committee deliberated and decided to formulate Indian Standards based on AIS 198, AIS 199, and AIS 200. It decided that once these standards are published, BIS may request the committee members to provide suitable drafts for formulating Indian standards based on above standard, or seek their assistance in preparing the drafts.</p> <p>Committee further decided that drafts prepared as above, would be issued into WC of 60 days.</p>	<p>Draft document, based on AIS 89, AIS 90 and AIS 91 have been dropped from the BIS Portal.</p> <p>AIS 198, AIS 199, and AIS 200 could not be found on ARAI webpage.</p> <p>Committee may please deliberate</p>

2.	<p>TED 11 (15885) W ‘Head light switches for automobiles – Specification (First revision of IS4061)</p>	<p><u>Status in 31st meeting:</u> Correction as per decision of the 30th meeting has been done in F-Draft and it has been processed for further action. <u>Committee may please note.</u></p> <p><u>Decision in 31st meeting:</u> Committee noted the information.</p>	<p>Document has been published as IS 4061: 2024. <u>Committee may please note.</u></p>
3.	<p>TED 11 (20542) Self-Cancelling Direction Indicator Switch for Automotive Vehicles – Specification (First Revision of IS 4815)</p>	<p><u>Status in 31st meeting:</u> Comments received on TED 11 (20542)W are attached at Annexure 2. <u>Committee may please deliberate.</u></p> <p><u>Decision in 31st meeting:</u> Committee deferred the subject for further deliberation in next meeting</p>	<p>Comments received on TED 11 (20542)W are attached at ANNEXURE 2. Status is same as in 31st meeting. Committee may please deliberate.</p>
4.	<p>TED 11 (20737) Push Button Type Switch for Automotive vehicles – Specification (First Revision of IS 9521)</p>	<p><u>Status in 31st meeting:</u> Comments received on draft document are: MSIL: Not CMVR item, ACMA to further comment. LEAR: No Comment/No exptrise</p> <p>However, it is observed that following standards referred in TED 11 (20737) have been withdrawn: IS 9000 (Part 2/ Sec 4) : 1977 IS 9000 (Part 3/ Sec 5) : 1977 IS 9000 (Part 12) : 1981 Committee may please deliberate.</p> <p><u>Decision in 31st meeting:</u> Committee deferred the subject for further deliberation in next meeting.</p>	<p>Status is same as in 31st meeting. Committee may please deliberate.</p>

<p>5.</p>	<p>TED 11 (22534) Recommendation for Polarity of Earth Connections and Marking of Electrical Equipment for Automobiles (First Revision of IS 7471)</p>	<p>Status in 31st meeting:</p> <p>On Draft document, following comment is received MSIL (date: 23.11.2023):</p> <p>Not CMVR item, ACMA to further comment</p> <p>Draft document is attached at Annexure 3. Committee may please deliberate.</p> <p>Decision in 31st meeting: Committee deferred the subject for further deliberation in next meeting</p>	<p>Draft document is attached at ANNEXURE 3.</p> <p>Committee may please deliberate.</p>
<p>6.</p>	<p><u>TED/11/23335</u> Revision of IS 1884: 1993 AUTOMOTIVE VEHICLES - AUDIBLE WARNING DEVICES SPECIFICATION</p>	<p>Status in 31st meeting:</p> <p><i>For Revision of IS 1884: 1993</i></p> <p>Panel 1 meeting was held on 17/4/2024. Minutes of the panel 1 meeting and ppt shared by MSIL during panel meeting are attached at Annexure 4.</p>	<p>Subject was discussed in Panel 1 meeting. Minutes of the Panel 1 is attached at ANNEXURE 4</p> <p>Committee may please deliberate</p>
<p>7.</p>	<p>IS: 15794 2008 Automotive Vehicles - Horn installation requirements</p>	<p>Comments received from members are attached at Annexure 5.</p> <p>Committee may please deliberate</p> <p><i>For IS 15796: 2008</i></p> <p>MSIL has reviewed the standard and with consent of Panel 1 members they briefed the review report to the Panel 1 members in its meeting held on 17.4.2024. For deliberation held on review document, please refer the minutes of panel 1 meeting attached at Annexure 4. Comments received from M/s BAL is attached at Annexure 5. Committee may please deliberate.</p> <p>Decision in 31st meeting:</p>	

		<p>Shri Rajkumar Dwivedi from MSIL briefed the minutes of the panel 1 meeting. He further mentioned that based on input received, Panel convenor Shri Gururaj Ravi would convene the next panel meeting shortly.</p> <p>Committee modified the scope of Panel (pl refer item 2.6).</p> <p>Committee deliberated and requested panel to deliberate in detail, and provide its final recommendation before next committee meeting. It mentioned that for other components we are trying to align our standards with UNECE, in this case also we may think same, however panel to deliberate in detail taking account every aspect.</p>	
8.	<p><u>TED/11/23075</u> Revision of IS 9433: 1980</p> <p>PIANO KEY TYPE SWITCHES FOR USE IN AUTOMOBILES SPECIFICATION</p>	<p>Status in 31st meeting:</p> <p>Comments received from Members before the 30th meeting are attached at Annexure 6.</p> <p>Clarification from UNO Minda received via mail dated 25.4.24 is also attached at Annexure 6.</p> <p>Committee may please deliberate.</p> <p>Decision in 31st meeting: Committee deferred the subject for deliberation in next meeting</p>	<p>Comments received from Members before the 30th meeting, and clarification from UNO Minda are attached at ANNEXURE 5.</p> <p>Status is same as in 31st meeting.</p> <p>Committee may please deliberate.</p>
9.	<p><u>TED/11/23215</u> Revision of IS 4050: 1976</p> <p>HORN SWITCHES FOR AUTOMOBILES METHODS OF TESTS</p>	<p>Status in 30th meeting:</p> <p>P Draft was circulated on 25.07.2023 Last Date for Comment: 24.09.2023</p> <p>Comments received from committee members are attached at Annexure-5 Committee may please deliberate and decide to issue the draft into WC.</p> <p>Decision in 30th meeting:</p>	<p>Minutes of Panel 2 meeting is attached at ANNEXURE 6.</p> <p>Status is same as in 31st meeting.</p> <p>Committee may please deliberate.</p>

		<p>Mr. Varun from Heromotocorp briefed his comments. Committee deliberated and constituted a Panel (P2). Committee requested P2 to deliberate on comment received and submit its recommendation to the BIS by 15 January 2023.</p> <p>Status in 31st meeting: Panel 2 meeting was held on 21.2.24. Minutes of Panel 2 meeting is attached at Annexure 7. Committee may please deliberate.</p> <p>Decision in 31st meeting:</p> <p>Committee deferred the subject for deliberation in next meeting</p>	
10.	TED 11 (15614) ‘Rear marking plates — Rear marking plates for heavy and long vehicles’ (Adoption of AIS 089:2019)	<p>Status in 31st meeting: Please refer SI No 1 of ITEM 3.</p> <p>Decision in 31st meeting: Please refer SI No 1 of Item 3.</p>	<p>Draft document TED 11 (15614) has been dropped.</p> <p>For detail, please refer SI No 1 of Item 3.</p>
11.	TED 11 (16959) P ‘Road vehicles – Fuse links Part 3: Fuse-links with tabs blade type, Type C Medium Type E High Current Type F miniature type N and type P sub-miniature	<p>Status in 31st meeting:</p> <p>While preparing the draft document to process it to publication, following points are observed:</p> <ol style="list-style-type: none"> 1. In table 1- Type E is mentioned in Column 2 and Column 3 2. In Table 2- 	<p>Draft document TED 11 (16959) F is attached at ANNEXURE 7.</p> <p>Status is same as in 31st meeting.</p> <p>Committee may please deliberate.</p>

		<p>For operating time resting test, <i>IR or 1.10 IR a) 1.35 IR a) 1.60 IR 2.00 IR</i> are mentioned and in Table 4 test current mentioned are <i>IR or 1.10 IR a) 1.35 IR a) 1.60 IR 2.00 IR, 3.5 IR and 6 IR</i></p> <p>However in ISO 8823-3, In Tables corresponding to Table 2 and Table 4, for operating time resting test and test current <i>IR or 1.10 IR 1.35 IR 1.60 IR 2.00 IR, 3.50 IR, 6.00 IR</i> are mentioned.</p> <p>Draft document TED 11 (16959)F is attached at Annexure 8. Committee may please deliberate.</p> <p>Decision in 31st meeting: Committee deferred the subject for deliberation in next meeting</p>	
12.	<p>IS/ISO 6722-1 : 2011</p> <p>Road vehicles -- 60 V and 600 V single-core cables -- Part 1: Dimensions test methods and requirements for copper conductor cables</p> <p>IS/ISO 6722-2 : 2013</p> <p>Road vehicles - 60 V and 600 V single - Core cables: Part 2 dimensions, test methods and requirements for aluminium conductor cables (First Revision)</p>	<p>Status in 31st meeting:</p> <p>ISO 6722-1 : 2011 and ISO 6722-2: 2013 have been withdrawn. Committee may please deliberate.</p> <p>Decision in 31st meeting: Committee deliberated and deferred the subject for deliberation in next meeting</p>	<p>Status is same as in 31st meeting.</p> <p>Committee may please deliberate.</p>
13.	<p>IS 13931 (Part 1): 1993</p> <p>Automotive vehicles - Stoplight switches: Part 1 specification</p>	<p>In 30th meeting, IS 13931 Part 1 and Part 2 were allocated to ACMA for review.</p> <p>Status in 31st meeting:</p>	<p>No comments are received on review documents.</p> <p>Committee may please deliberate.</p>

	<p>IS 13931 (Part 2): 1993 Automotive vehicles - stoplight switches: Part 2 Methods of Test</p>	<p>Review report was received from ACMA vide mail dated 20.2.2024.</p> <p>Review reports have been circulated through BIS portal and they can be accessed by clicking on followings:</p> <p><u>Review report IS 13931 Part 1</u> <u>Review report IS 13931 Part 2</u></p> <p>Committee may please deliberate.</p> <p>Decision in 31st meeting:</p> <p>Committee deferred the subject for deliberation in next meeting</p>	
<p>14.</p>	<p>IS 8339: 1993 Automotive vehicles - Reflex reflectors - Specification</p>	<p>Status in 31st meeting:</p> <p>Review report was received from ACMA vide mail dated 19.2.2024.</p> <p>Review report has been circulated through BIS portal and it can be accessed by clicking on followings:</p> <p><u>Review report of IS 8339: 1993</u></p> <p><u>Comment from ARAI vide mail dated 23.4.24:</u></p> <p>this standard is older version and currently not using in automotive application since 2010. At this juncture applicable standard is AIS:57 Rev1 and soon it will be replaced by AIS:200.</p> <p>Considering the fact, you may withdraw this standard.</p> <p>Committee may please deliberate.</p> <p>Decision in 31st meeting:</p>	<p>Comments has been received from MSIL vide BIS Portal:</p> <p><i>MSIL is aligned with TED 11 Recommendations as subject is adequately covered in AIS 200</i></p> <p>Committee may please deliberate.</p>

		BAL also expressed their agreement with ARAI and MSIL comment. Committee deferred the subject for deliberation in next meeting	
15.	IS 4063 : 1982 Specification for fuse box for automobiles (First Revision)	<p>Status in 31st meeting:</p> <p>Review was done by BIS officer Shri Niraj Kumar.</p> <p>Review report has been circulated and it can be accessed by clicking on the followings:</p> <p><u>Review report of IS 4063: 1982</u></p> <p>Committee may please deliberate.</p> <p>Decision in 31st meeting:</p> <p>Committee deferred the subject for deliberation in next meeting</p>	<p>Following comments are received vide BIS Portal:</p> <p>From Lear: No expertise on the specified topic</p> <p>From MSIL: Component level standard. Need ACMA to comment</p> <p>Committee may please deliberate.</p>
16.	IS 7998 : 1986 Specification for contact breakers for two wheelers, three wheelers and stationary spark ignition engines (First Revision)	<p>Status in 31st meeting:</p> <p>Review was done by BIS officer Shri Nishant Parasar.</p> <p>Review report has been circulated and it can be accessed by clicking on the followings:</p> <p><u>Review report of IS 7998: 1986</u></p> <p>Committee may please deliberate.</p> <p>Decision in 31st meeting:</p> <p>Committee deferred the subject for deliberation in next meeting</p>	<p>No comments are received on review document.</p> <p>Committee may please deliberate.</p>

<p>17.</p>	<p>IS 7827 : Part 3 : Sec 2 : 1985</p> <p>Specification for electrical wind screen wiper: Part 3 wiper arms and blades section 2 wiper blades</p>	<p>Status in 31st meeting: Review was done by BIS officer Shri Mitrasen Verma</p> <p>Review report has been circulated and it can be accessed by clicking on the following:</p> <p><u>Review report of IS 7827 Part 3 Sec 2: 1985</u> Committee may please deliberate.</p> <p>Decision in 31st meeting: Committee deferred the subject for deliberation in next meeting</p>	<p>Following comments are received vide BIS Portal: From Lear: No expertise on the specified topic</p> <p>From MSIL: Component level standard. Need ACMA to comment</p> <p>Committee may please deliberate.</p>
<p>18.</p>	<p>IS 2081 : 1998</p> <p>Automotive vehicles - Taper terminal cable connectors for batteries - Specification (Second Revision)</p>	<p>Status in 31st meeting: Review was done by BIS officer Shri Hariom Meena</p> <p>Review report has been circulated and it can be accessed by clicking on the followings:</p> <p><u>Review report of IS 2081: 1998</u> Committee may please deliberate.</p> <p>Decision in 31st meeting: Committee deferred the subject for deliberation in next meeting</p>	<p>Following comments are received vide BIS Portal:</p> <p>From Lear: Replace IS 2: 1960 ◆Rules for rounding off numerical values (revised)' with latest IS 2: 2022 ◆Rules for rounding off numerical values (Second Revision)◆</p> <p>From MSIL: Component level standard. Need ACMA to comment</p> <p>Committee may please deliberate.</p>
<p>19.</p>	<p>Standards on Cyber Security</p>	<p>Decision in 31st meeting: On Lear proposal, Shri Kiran from Lear presented a presentation (attached). Shri Vijay mentioned that AIS 189 and AIS 190 have been approved by CMVR for notification and ISO 21434 is referred in it also.</p> <p>Shri Sumit from MSIL mentioned that subject AIS 189 and AIS 190 was</p>	<p>National foreword for adoption of ISO 21434 has been issued into WC. Doc No: TED/11/26207 WC Date: 24.7.2024 Comments Received : I agree with the Draft</p>

		<p>discussed in last meeting of TED 28. Shri Vijay from Renault mentioned that since cybersecurity affects the electrical components directly, (electrical component under the Scope of TED 11) it should come under TED 11. It was decided that HTED will take-up the subject for deliberation with TEDC Chair. Committee deliberated and decided to formulate Indian Standards based on AIS 189 and AIS 190. Committee constituted a panel P-3 and requested it to provide the draft document based on AIS 189 and AIS 190. It authorized BIS to issue the draft documents into WC of 60 days once the drafts are received from Renault.</p> <p>Further it also decided to adopt ISO 21434 identically under single numbering system and requested BIS to issue the National Foreword into WC of 60 days.</p>	<p>(from- MSIL, LEAR, Ministry of MSME)</p> <p>Draft document based on AIS 189 and AIS 190 are received from Renault.</p> <p>It will be shared shortly via mail.</p> <p>Regarding the subject, pertaining to TED 11 and TED 28, it will be taken up in next meeting of TEDC.</p> <p>Committee may please deliberate.</p>
<p>20.</p>	<p>IS 1606 : 1979 Specification for automobile lamps (Second Revision)</p>	<p>In 31st Meeting: In 31st meeting, Shri P N Bhawgan mentioned that he had completed the review and shared the draft with BIS. Committee requested member secretary to check the minutes of previous meetings and take necessary action.</p>	<p>Draft document was shared by Shri P N Bhagwan through mail. However document has been sent back to SHRI P N Bhagwan for providing input on BIS query.</p> <p>Draft document sent back to Shri P N Bhagwan, will be shared through mail shortly.</p> <p>Committee may please deliberate.</p>

ITEM 4 RESEARCH PROJECTS TO BE TAKEN UP FOR INCLUSION OF EMPIRICAL DATA AND INSIGHTS

Decision in 31st Meeting: Committee deliberated and requested members to submit, comment if any within 2 weeks. It further decided that if no comments are received, ToR attached in agenda shall be considered as approved, however if any comment is received, it shall be taken with Chairperson for consideration and approval.

Present Status:

No comment was received on ToR in specified timeline, it was shared with internal Screening Committee. Final ToR was hosted on BIS portal on **21.6.2024**.

As per R&D guideline, Two Experts from the Sectional should be part of Research Evaluation Committee. These experts shall be nominated by the Sectional Committee and the nominated members shall give a declaration to the effect that there is no conflict of interest with respect to the project.

Committee may please deliberate.

ITEM 5 COMMENTS/CLARIFICATION ON INDIAN STANDARDS

5.1 MSIL Comment on IS 13427 (vide mail dated 14.5.2024)

Please find the attached IS 13437-2012 standard considering this ISO 3559 standard for reference collected from BIS.

Both ISO and IS standards are withdrawn and do not have a replacement standard.



We can quote this ISO/IS as reference to the Test agency for our approval

Committee may deliberate.

ITEM 6 REVIEW OF PUBLISHED STANDARDS

6.1 The Sectional Committee may review all the standards formulated by it and identify the standards that are not required by the industry due to change in technology, obsolescence, etc, for withdrawal and the standards that need to be amalgamated or to be revised. During review, the committee may decide either to **reaffirm**, **revise** or to **withdraw** the standards based on latest technology available on the subject at the time of review

6.2 List of Indian Standards which were due for review in 2023-24 and 2024-25, and allocated to Committee members are as below.

For SI No 1 to 20, in 31st Meeting, committee noted the information and requested ACMA and SIAM to expedite the review and submit the report to BIS before next meeting. Shri Sumit from MSIL mentioned that for IS 15802, IS 15804 and IS 7827 Part 3 Sec 1, MSIL has received the request from SIAM for reviewing and leading the Panel on these subjects, so it may be allocated to MSIL. Committee deliberated and allocated review of standards (IS 15802, IS 15804 and IS 7827 Part 3 Sec 1) to MSIL, provided confirmation is received to BIS from SIAM.

For allocation of standards IS 15802, IS 15804 and IS 7827 Part 3 Sec 1, no confirmation is received from SIAM. However, vide mail dated 6 May 2024, SIAM has requested, to appoint Mr Gururaj Ravi, Vice President (Regulatory Affairs and Policy), Maruti Suzuki, as the Panel Convenor for standards (IS 15802, IS 15804 and IS 7827 Part 3 Sec 1), pertaining to Windscreen Wiping.

SI. No.	IS No.	Title	Remarks	Committee Decision In 30 th meeting	Status
1.	IS 1884 : 1993	Automotive vehicles - Electric horns - Specification (Third Revision)	Based on UNECE Regulation	Allocated to ACMA	Already taken under SI No 6 of ITEM 3.
2.	IS 2081: 1998	Automotive vehicles - Taper terminal cable connectors for batteries - Specification (Second Revision)	Assistance- JIS D 5403:1977 Cable terminals for automobiles	Allocated to ACMA	INPUT AWAITED
8.	IS 8339: 1993	Automotive vehicles - Reflex reflectors - Specification (First Revision)	Based on UNESC regulation 3.	Allocated to ACMA	Please refer SI. 15 of ITEM 3
9.	IS 11086: 2013	Speedometer/odometer systems for automotive application - Specification (First Revision)	Based on DIN 75532-1:1976 Transmission of rotary motion; Types of connection to gears, Intermediate gears, flexible drive shafts and equipment	Allocated to ACMA	INPUT AWAITED
10.	IS 12508: 2013	ELECTRIC TACHOMETER FOR AUTOMOTIVE VEHICLES — SPECIFICATION		Allocated to ACMA	INPUT AWAITED

11.	IS 13602: 2013	Automotive vehicles Instrument systems - Temperature gauges mechanical types - Specification (First Revision)		Allocated to ACMA	INPUT AWAITED
12.	IS 13646: 2018	Automotive vehicles Instrument systems - Pressure gauges electrical / electronic type specification (First Revision)	SAE J 1810 : 2010 'Electrical indicating systems specification'.	Allocated to ACMA	INPUT AWAITED
13.	IS 13654: 1993	Automotive vehicles- Instrument systems- Electrical speedometer performance requirements		Allocated to ACMA	INPUT AWAITED
14.	IS 13931 (Part 1): 1993	Automotive vehicles - Stoplight switches: Part 1 specification		Allocated to ACMA	Please refer SI. No 14 ITEM 3
15.	IS 13931 (Part 2): 1993	Automotive vehicles - stoplight switches: Part 2 methods of test		Allocated to ACMA	
16.	IS 15364: 2003	Automotive vehicles - Spark - Plugs M10 x 1 with flat seating	ISO 2704 : 1998 'Road vehicles M10 × 1 spark- plugs with flat seating and their cylinder head housing* ISO 14508 : 1997 'Road vehicles — Spark-plug — Terminals'	Allocated to SIAM	INPUT AWAITED
17.	IS 15796: 2008	Automotive vehicles - Horn installatio nrequirements	Based on AIS 014 - 2001 Automotive vehicles - Horn installation requirement	Allocated to SIAM	INPUT AWAITED from SIAM. However, MSIL has reviewed the standard, please refer SI No 7 of ITEM 3
18.	IS 15802 : 2008	Automotive vehicles - Windscreen wiping system for 4 wheelers other than ml category of vehicles - Requirements		Allocated to SIAM	INPUT AWATED from SIAM. However, MSIL has reviewed IS 15802,
19.	IS 15804 : 2008	Automotive vehicles - Windscreen wiping and washing system for ml category of vehicles - Requirements		Allocated to SIAM	IS 15804, and IS 7827 Part 3/ Sec 1 and shared the input. Input received from SIAM are attached at Annexure 8
20	IS 7827 (Part 3/Sec 1) :	Automotive vehicles electrical wind screen wipers:		Allocated to SIAM	

	1993	Part 3 wiper arms and blades section 1 wiper arms - Specification			
21	IS 1062 : 2014 ISO 11565:2006	Road vehicles - Spark - Plugs - Test methods and requirements (Third Revision)		Committee allocated the review of these standards to ACMA	INPUT AWAITED
22	IS 12588 : 2014	Automotive vehicles - Oil and air assisted pressure gauges - Specification (First Revision)			
23	IS 13599 : 2014	Automotive vehicles - Instrument systems - Temperature gauges - Electrical and Electronic type - Specification (First Revision)			
24	IS 14141 : 1994	Automotive vehicles - Electrical windshield washing systems - Performance requirements			
25	IS 2077 : 2014	Automotive vehicles - Electric relays - Specification (Third Revision)			
26	IS 4060 : 1994	Automotive vehicles - Flashers for direction indicators - Specification (Second Revision)			
27	IS 5577 : 2015	Automotive vehicles - Ammeters - Specification (Third Revision)			
28	IS 17436 : 2020	Automotive Vehicles - Advance-Warning Triangle - Specification			

Committee may please deliberate.

6.3 List of Pre 2000 standards is attached at **ANNEXURE 9**. Committee may please deliberate and archive the applicable standards as per Reforms measure guideline.

Policy of Archiving has been adopted to help the SCs prioritise the review of standards. The standards, which cannot be withdrawn, but have lost relevance due to diminishing use in the wake of onset of new products, processes or test methods, can be archived, and a mention to this effect shall be made against that standard in the database of the Published standards. This will not only enable the SCs to focus on more important standards, but will also keep the window open for the stakeholders to point out if the review is required.

ITEM 7 NEW WORK ITEM PROPOSAL

7.1 No new work item proposal is received after 31st meeting.

7.2 Dr Om Krishan (from Meity) had shared a list of standards being followed for certification. It was taken up in the 14th meeting of TED 27 and committee suggested that ISO 16750 Parts 2, 3, and 4, relate to electrical components in automobiles, thus these subjects may be taken up for further deliberation in TED 11 committee.

ISO 16750-1:2023	Road vehicles — Environmental conditions and testing for electrical and electronic equipment — Part 1: General
ISO 16750-2:2023	Road vehicles — Environmental conditions and testing for electrical and electronic equipment Part 2: Electrical loads
ISO 16750-3:2023	Road vehicles — Environmental conditions and testing for electrical and electronic equipment Part 3: Mechanical loads

Committee may please deliberate.

7.3 In 31st meeting, committee had decided the following subjects for deliberation in next meeting.

Sl No	Subject	Proposer	About Subject	Remarks
1	Backup Alarm	Roots Industries India Private Limited, Coimbatore	Detailed proposal was shared with members vide BIS portal dated 19.11.2023.	Comment from MSIL: Backup Alarm standard (Reverse Warning Device) already exists in CMVR. Hence, the proposal may be dropped.
2	DC to DC Voltage converters		DC to DC Voltage converters are widely being used in EV. BIS standard can be developed to frame the product requirements	As DC to DC subject, is mainly used in EV, the subject has been taken up deliberation in TED 27 (Electric and Hybrid Vehicles Sectional Committee)
3	Mobile phone Chargers / USB Charger		USB Chargers are widely used in Automotive & other applications BIS standard can be developed to frame the product requirements	M/s Roots may share a brief presentation elaborating the subjects, relevant stakeholders, necessity of standardization and other aspects, if any.

Committee may please deliberate.

ITEM 8 INTERNATIONAL ACTIVITIES

8.1 BIS membership of ISO Technical Committees and subcommittees relevant to scope of Automotive electrical Equipment and instruments Sectional Committee, TED 11, are given below:

SI No.	ISO Committee/ Sub Committee	TITLE	Type of membership
1	ISO/ TC 22	Road vehicles	P
2	ISO/ TC 22/ SC 32	Electrical and electronics components and general system aspects	P
3	ISO/TC 22/ SC 35	Lighting and visibility	P

The committee may please note.

8.2 The list of working groups/ panels with their titles under technical committee ISO/ TC 22 and its subcommittees ISO/ TC 22/SC 32 and ISO/ TC 22/SC 35 are given at **ANNEXURE 10**. Committee may please note

8.3 ISO Ballots

Committee may deliberate on comments received from LEAR on ISO/SAE CD PAS. Comments and documents have been circulated with members vide mail dated 30.03.2024 and 30.4.2024.

8.4 ISO Standards

8.4.1 The list of ISO standards published by ISO/ TC 22 and its sub-committees and ISO TC 22 SC 32 and ISO TC 22 SC 35 can be accessed through following link:

1. <https://www.iso.org/committee/46706/x/catalogue/p/1/u/0/w/0/d/0>
2. <https://www.iso.org/committee/5383636/x/catalogue/p/1/u/0/w/0/d/0>
3. <https://www.iso.org/committee/5383897/x/catalogue/p/1/u/0/w/0/d/0>

The committee may review the ISO standards and categorize them as per following broad categories:

- a. ISO Standards which can be directly adopted as Indian Standards without any change.
- b. ISO standards which can be modified technically as per our country's needs and then adopted as Indian Standards.
- c. ISO Standards which are not at all suitable for our country needs and may not be adopted at all.

The committee may please consider and decide adoption of ISO standards, if any.

8.4.2 In 31st meeting, the committee had constituted Panel 4 and Panel 5. Panel 5 meeting was held on 3.9.2024. Minutes of Panel 5 meeting is attached at **ANNEXURE 11**.

Committee may please deliberate.

8.5 Participation in WG

Following Members have been nominated in various Working groups of ISO by TED11:

ISO WGs	Titles	Nominated Members
ISO/TC 22/SC 32/WG 8	Functional safety	Shri Tushar Yadav Shri Kiran Deosarkar
ISO/TC 22/SC 32/WG 11	Cybersecurity	Shri Tushar Yadav Shri Kiran Deosarkar
ISO/TC 22/SC 32/WG 4	Automotive electrical cables	Shri Rajeev Malhotra

Nominated experts may please brief the status of development under ISO WGs.

8.6 IR PORTAL- Brief by Member Secretary

8.7 Guideline received from PNC (Planning and Coordination Department) for adoption of ISO/IEC standards and designation of experts for ISO/IEC projects, are attached at **ANNEXURE 12**. Committee may please not

ITEM 9 PROGRAM OF WORK

PoW of TED 11 committee, can be accessed through following link:

[https://www.services.bis.gov.in/php/BIS 2.0/bisconnect/pow_details](https://www.services.bis.gov.in/php/BIS_2.0/bisconnect/pow_details)

Committee may please note the status of documents in TED 11.

ITEM 10 ROAD MAP OF STANDARDIZATION WORK OF TED 11

Committee may deliberate and formulate the roadmap of standardization work of Sectional Committee Automotive Electrical Equipment and Instruments- TED 11.

ITEM 11 STANDARDS NOTIFIED UNDER CMVR

List of standards notified under CMVR and pertinent to TED 11 committee are as follows:

IS No	Title
8415 : 1977	Mounting dimensions of head lights for automobiles Withdrawn
15796 : 2008	Automotive vehicles - Horn installation requirements
1884	Automotive vehicles - Electric horns - Specification (Third Revision)
15802	Automotive vehicles - Windscreen wiping system for 4 wheelers other than ml category of vehicles - Requirements

15804	Automotive vehicles - Windscreen wiping and washing system for ml category of vehicles - Requirements
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Committee may deliberate and update the list (if any standard missing).

ITEM 12 ANALYTICAL REPORTS/ADVANCED DASHBOARD

Committee may note the features of advance dashboard

ITEM 13 DATE FOR THE NEXT MEETING

Meeting Number	Meeting Date	Mode
33 rd	19 February	Virtual

As per annual calendar prepared by committee during 31st meeting, 33rd meeting of TED 11 would be held as above. Committee may please note

ITEM 4 ANY OTHER BUSINESS