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BUREAU OF INDIAN STANDARDS

AGENDA

Name of the Committee	No. of Meeting	Day	Date	Time	Venue
Conductors and accessories for overhead lines Sectional Committee, ETD 37	24 th	Tuesday	19 th Nov 2024	11:00 AM	Join meeting

CHAIRMAN: Shri Anish Anand

MEMBER SECRETARY: Shri Ashok Kumar

Item 0 GENERAL

0.1 WELCOME & OPENING REMARKS BY THE CHAIRMAN

Item 1 CONFIRMATION OF THE MINUTES OF THE LAST MEETING

The minutes of the 23rd meeting of Conductors and accessories for overhead lines Sectional Committee, ETD 37, held on 31st May 2024 virtually, circulated on 11th June 2024.

No comments were received.

The Committee may formally confirm the minutes.

Item 2 COMPOSITION OF CONDUCTORS AND ACCESSORIES FOR OVERHEAD LINES SECTIONAL COMMITTEE, ETD 37

2.1 The present composition of Conductors and accessories for overhead lines Sectional Committee, ETD 37 is given at **Annex 1**.

2.2 Compositions of ETD 37 Panel 1, 2 & 3 are given at **Annex 2**. The committee may review.

The Committee may consider the participation status of the member organizations and review the composition. The Committee is also requested to give suggestions for improvement in participation status of the members.

Item 3 ACTIONS ARISING OUT OF PREVIOUS MEETING

S. No.	Item	Action reported in the last meeting	Decision Taken in the last meeting	Action
1)	Revision of IS 2121 (Part 1): 1981 Doc ETD 37 (25450) Specification for	The drafts on IS 2121 series were circulated to ETD37: P-2 members requesting them to provide their comments by 20th Dec 2023.	It was decided to circulate the drafts on IS 2121 Series among the committee members as preliminary drafts for their comments and	Mr. Chandra Kant from M/s POWERGRID submitted comments on the IS 2121 series via email on June 10, 2024. He was requested to resubmit the comments using the BIS commenting template, and these were subsequently resubmitted on

	<p>conductors and earth wire accessories for overhead lines, Part 1: Armour rods, binding wires, and tapes for conductors.</p> <p>Revision of IS 2121 (Part 2): 1981</p> <p>Doc ETD 37(25451)</p> <p>Specification for conductors and earth wire accessories for overhead lines, Part 2: Mid-span joints and repair sleeves for conductors.</p> <p>Revision of IS 2121 (Part 3): 1992</p> <p>Doc ETD 37 (25452)</p> <p>Conductors and earth wire accessories for overhead lines, Part 3: Accessories for earth wire – Specification.</p> <p>Revision of IS 2121 (Part 4): 1991</p> <p>Doc ETD 37 (25452)</p> <p>Conductors and earth wire accessories for overhead lines, Part 4: Non-tension wires – Specification.</p>	<p>Comments received from Mosdorfer India Pvt Ltd on terminology clause incorporated in the draft standard.</p> <p>No further comments were received from the P-2 members.</p> <p>The committee may discuss to wide circulate the drafts.</p>	<p>Review for the duration of 45 days.</p>	<p>September 29, 2024. Dr. M. Selvaraj, Convener of P-2, has been requested to propose a suitable date for a panel meeting to discuss POWERGRID's comments.</p> <p>The ETD 37/P-2 meetings to review these comments have not yet been scheduled.</p> <p>In addition, the relevant IEC standard, IEC 61284, "Overhead Lines - Requirements and Tests for Fittings," is currently under revision (CD stage). The committee may consider adopting this IEC standard as a replacement for the IS 2121 series.</p> <p>The committee members are requested to discuss and expedite the revision process for the IS 2121 series, as these pre-2000 standards require priority revision.</p>
<p>2)</p>	<p>Drafts of ACSS and ACCC standards</p>	<p>SC-1 had separate meetings but members could not arrive on final format of standards. Different sizes can be indicated for conventional conductors but for HTLS conductors, it may not be feasible to add different sizes. SC-1 was requested to kindly hold meetings to finalize the working drafts for ACSS and ACCC standards.</p>	<p>The formulation of new standards related to IS 398 Series was put on hold until the existing parts of the IS 398 series underwent revision.</p>	<p>The following new subjects assigned to interns for conducting pre-standardization work:</p> <p>1) Aluminium Carbon Fiber composite core conductor</p> <p>The detailed report submitted by Intern is attached at Annex 3 for consideration of the committee. Additionally, following IEC documents are under development on the same subject:</p> <p>a) IEC TS 62818-1 ED1: Conductors for overhead lines - Fiber reinforced</p>

				<p>composite core used as supporting member material - Part 1: Polymeric matrix composite cores</p> <p>b) IEC TS 62818-2 ED1: Conductors for overhead lines - Fiber reinforced composite core used as supporting member material - Part 2: Metallic matrix composite cores</p> <p>2) Thermal Resistant Aluminium Alloy Conductor Steel Reinforced (TACSR)</p> <p>The detailed report submitted by Intern is attached at Annex 4 for consideration of the committee.</p> <p>The committee members are requested to kindly review these reports and share views on formulation of Indian standards on these subjects.</p>
3)	ref. ET:37/T-28 dated 2014-12-10 (doc:ETD-37(6777) for IS 398(Part 7) , Steel reinforced, thermal-resistant Aluminium alloy conductor – Specification			
4)	ref. ET:37/T-29 dated 2014-08-01(doc:ETD-37(6778) for IS 398(Part 8)), Super thermal resistant aluminium clad invar reinforced aluminium alloy stranded conductor – Specification			



5)	ref. ET:37/T-30 dated 2014- 08-01(doc:ETD-37(6779) for IS 398(Part 9) , Gap type steel reinforced, super thermal resistant aluminum alloy stranded conductor – Specification			
6)	Revision of parts 1 to 5 of IS 398	The merged draft of IS 398 Part 2 and Part 5 was discussed in the P-1 meeting scheduled on 24th Nov 2023. The comments received on the draft standard discussed during the meeting.	<p>The following timelines have been decided to finalize the drafts on IS 398 Series for wide circulation:</p> <p>POWERGRID will circulate the drafts on IS 398 Part 2 and IS 398 Part 4 by 15th March 2024.</p> <p>ETD37: P-1 members are requested to review and provide comments within 15 days from the date of circulation.</p> <p>Comments received will be discussed in the P-1 meeting tentatively scheduled in the 1st week of April.</p> <p>The finalized drafts from the P-1 members will be circulated among ETD 37 members as preliminary drafts for their comments.</p>	<p>The merged draft of IS 398 Part 2 and Part 5 was discussed in the P-1 meeting held on 24th July 2024 and recommended for wide circulation.</p> <p>The draft was wide circulated on Sep 22, 2024 for the duration of 45 days.</p> <p>Last date of comments: 7 November 2024</p> <p>Mr. Pradeep Agnihotri M/s Apar Industries shared the updated draft of IS 398 (Part 4) on Sep 27, 2024. The draft was circulated among P-1 members for their review and comments.</p> <p>No comments have been received from the P-1 members.</p> <p>The next meeting of P-1 is scheduled on Nov 11, 2024 to discuss the draft on IS 398 (Part 4) and comments received on IS 398 (Part 2) during wide circulation stage.</p>
7)	Revision of IS 5613 Series			

<p>7.2</p>	<p>IS 5613 (Part 1/Sec 1): 1985 Code of practice for design installation and maintenance of overhead power lines Part 1 lines up to and including 11 kV Sec 1 design First Revision</p> <p>IS 5613 (Part 1/Sec 2): 1985 Code of practice for design installation and maintenance of overhead power lines Part 1 lines up to and including 11 kV Sec 2 installation and maintenance</p> <p>IS 5613 (Part 2/Sec 1): 1985</p> <p>Code of practice or design, installation and maintenance of overhead power lines: Part 2 lines above 11 kv and up to and including 220 kv sec 1 design (First Revision)</p> <p>IS 5613 (Part 2/Sec 2): 1985</p> <p>Code of practice for design, installation and maintenance of overhead power lines: Part 2 lines above 11 kV and up to and including 220 Kv: Sec 2 installation and maintenance (First Revision)</p>	<p>Nominations from the Distribution Dept., CEA awaited. CEA is requested to kindly expedite and provide the nominations from Distribution Department.</p> <p>CEA to update the clauses related to Central Electricity Act and regulations. Following experts are nominate from their respective organizations:</p> <ol style="list-style-type: none"> 1. Mr. Ashok Moni M/s Sicame India 2. Mr. Ashish Nema M/s Adani Transmission Limited 3. Mr. Prasenjit Karmakar M/s CESE Ltd <p>The drafts on IS 5613 (Part 1/Sec 1) and IS 5613 (Part 1/Sec 2) circulated to the respective experts for their review and comments. Comments received from Mr. Arnab Routh M/s CESE Ltd. Other organizations are also requested to kindly provide the comments so that the Subcommittee meeting can be planned for further discussion.</p>	<p>Members from CEA are requested to kindly nominate experts from the relevant dept. of CEA.</p> <p>CEA agreed to provide the recommendations or updated drafts of these standards in consultation with other stakeholders.</p> <p>POWERGRID to check and arrange the representations on these parts of IS 5613 Series from their distribution engineering Dept.</p> <p>Members from Sicame and Adani Transmission limited are requested to kindly review these drafts and provide recommendations.</p>	<p>The recommendations received from CEA on these standards along with comments received from CESC Ltd. Circulated among the committee members on Sep 19, 2024 for review and provide the comments for further discussion. The recommendations are attached at Annex 5.</p> <p>No comments were received from the Committee members on these recommendations.</p> <p>The committee members are requested to discuss and expedite the revision process for the IS 5613 series, as these are pre-2000 standards require priority revision.</p>
<p>8)</p>	<p>IS 15976:2013 – Steel Reels and Drums</p>	<p>The committee decided that, the draft on IS 15976 will be discussed in P-1 meeting after finalizing the drafts on IS 398 series. The committee may approve the draft for wide circulation.</p>	<p>The committee decided that, the draft on IS 15976 will be discussed in P-1 meeting tentatively scheduled in the 1st week of April 2024.</p>	<p>The draft on IS 15976 has not yet been discussed in the P-1 meetings, as discussions on the IS 398 series drafts are still ongoing.</p>



9)	IS 9708:1993 – Stockbridge Vibration Dampers for Overhead Power Lines.	CPRI shared the updated draft on IS 9708 on 13 Feb 2024. The updated draft circulated among the technical committee member for their comments and review.	Members from CPRI and Tag Corporation to kindly review the possibility of identical adoption of IEC 61897 in dual numbering and provide the recommendation within 2 months for consideration.	CPRI observations on adoption of IEC 61897 are attached at Annex 6 . The committee may discuss the CPRI observations and provide their views on adoptions of IEC 61897 and inclusion of additional tests as recommended by CPRI.
10)	Revision of IS 3402: 1965 Specification for cadmium copper conductors for overhead railway traction	-	-	The draft of IS 3402 prepared as per the report submitted by BIS intern shared with the committee members on Oct 29, 2024 for review and comments. The members are requested to kindly discuss and review the draft standard.
11)	IS 2532: 1965 - Specification for hard - Drawn copper wire for telegraph and telephone purposes IS 2665: 1964 - Specification for cadmium copper wire for telegraph and telephone purposes	-	IS 2532: 1965 and IS 2665: 1964 are in process of withdrawal.	IS 2532: 1965 and IS 2665: 1964 have been withdrawn.



Item 6 Review of Published Standards for Revision/Reaffirmation

As per the guidelines, published Indian Standards should be reviewed after every five years. If no revision is called for, the standard(s) may be re-affirmed. Reaffirmation of the standard(s), however, does not prevent from these standard(s) being taken up for revision. The present status of ETD 37 standards is given at **Annex 7**.

Item 7 PROGRAMME OF WORK

The present position of work under Conductors and accessories for overhead lines Sectional Committee, ETD 37 is given in **Annex 7** for information.

The Committee may note.

Item 7 Identification of Research & Development Projects for Formulation and Review of Standards

The RnD project on 'Development of coefficients of modulus of elasticity and creep for various conductors, commonly being used in Indian transmission industry' has been awarded to **Nirma University, Ahmedabad**. As per the Guidelines for Research & Development Projects, the relevant Sectional Committees of BIS will monitor the project's progress to ensure adherence to the planned timeline and objectives. Progress reports will be shared with the technical committee members at each stage. Members are requested to review these reports thoroughly to help meet the project objectives within the stipulated timelines.

Item 8 INTERNATIONAL ACTIVITIES

8.1 Programme of Work and List of Published Standards

The details of published standards of IEC TC 07 and TC 11 are given at **Annex 8**.

8.2 Review of the Projects under IEC TC 7, TC 11 and designation of experts

SI No.	Project No.	Title of the Project	IN NC comments	Designated Experts
1	IEC TS 62818-1 ED1	Conductors for overhead lines - Fiber reinforced composite core used as supporting member material - Part 1: Polymeric matrix composite cores	In Favour, Without Comments	IEC standard already finalized
2	IEC TS 62818-2 ED1	Conductors for overhead lines - Fiber reinforced composite core used as supporting member material - Part 2: Metallic matrix composite cores	In Favour, Without Comments	IEC standard already finalized
3	IEC 61284 ED3	Overhead lines - Requirements and tests for fittings	In Favour, Without Comments	The committee may nominate expert for review of IEC standard in next stage.

8.3 Status of Reports Submitted by Experts nominated in IEC WGs/PT

SI. No	IEC TC/WG/PT/MT	Title	Experts Nominated	Report Submitted
1	IEC TC 07/MT 2	Concentric lay overhead electrical	Mr Chandra Kant M/s POWERGRID	Yes (Report attached at Annex- 9)



2		stranded conductors and tests methods	Mr Rajesh Gupta M/s Rajesh Gupta M/s POWERGRID	No
4	IEC TC 11/JWG 13	IEC 61284 - Requirements and tests for fittings linked to TC 7	Mr Chandra Kant M/s POWERGRID	Nomination processed in Sep 2024
4	IEC TC 11/WG 14	Requirements and tests for aeronautical warning balls	Mr Chandra Kant M/s POWERGRID	Nomination processed in Sep 2024

Item 9 DATE AND PLACE OF NEXT MEETING

Item 10 ANY OTHER BUSINESS