BUREAU OF INDIAN STANDARDS

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Name of the committee	Meeting No.	Day	Date	Time	Venue
Industrial Process Measurement and Control Sectional Committee, ETD 18	17th	Wednesday	14 Sep 2022	1030	Online Meeting

CHAIRPERSON: Shri Rajiv Gupta **MEMBER SECRETARY:** Shri Ashok Kumar

MEMBERS PRESENT:

Sl. No	Name	Organization	Attendee Email	Mobile No
1.	Shri Rajiv Gupta	Engineers India Limited, New Delhi	rajiv.gupta@eil.co.in	+91 9818341262
2.	Dr. Shiv Kumar Jaiswal	CSIR - National Physical Laboratory	skjaiswal@nplindia.org	+91 9958618375
3.	Shri Hardev Singh	Electronics Corporation of India Limited	hardev.214@gmail.com	+91 9700589868
4.	Shri Mainak Nandi	Engineers India Limited	m.nandi@eil.co.in	+91 9971581956
5.	Shri Anindyo Ray	Engineers India Limited	a.ray@eil.co.in	+91 9810250426
6.	Shri nandakumar	Chemtrols Industries Private Limited	nandakumar@chemtrols.com	+91 9821042703
7.	Shri C R Raju	Oil and Natural Gas Corporation Limited	crraju@gmail.com	+91 9969220203
8.	Shri Shankar Mathur	Rockwin Flowmeter India Private Limited	shankar@rockwin.com	+91 9821127335
9.	Shri Ashish Jha	Steel Authority of India Limited (SAIL)	ashishjha@sail.in	+91 9434791851
10.	Dr. M Suresh	Fluid Control Research Institute	m.suresh@fcriindia.com	9446310513
BIS DG				
	Shri Ashok Kumar	Scientist -B, ETD, BIS	ashok9413@bis.gov.in	7755839773

ITEM 0 WELCOME AND OPENING REMARKS BY THE CHAIRPERSON

0.1 Mr. Rajiv Gupta, Chairperson, ETD 18 extended a hearty welcome to the members present. He asked all the working groups to actively work on their subject standards and requested members to contribute for incorporating the latest practices to provide the best products for utilities.

0.2 Shri Ashok Kumar, Member Secretary of ETD 18, welcomed all the members present in the meeting. The meeting started with a brief introduction of the members present.

ITEM 1 CONFIRMATION OF THE MINUTES OF THE LAST MEETING

1.1 There being no comments, the Committee confirmed the minutes of the last meeting of ETD 18 held on 26.10.2021.

1.2 Action Arising Out of Previous Meeting

S.No	Item	Decision	Action Taken
1.	Composition of Sectional Committee and Co-option Requests	The committee decided to co-opt thefollowing organizations in the sectional committee: **1.** Vizag Steel **2.** NALCO **3.** MECON Limited, Ranchi **4.** Pyrotech Electronics Private Reminder letters and Co-option requests have been sent. Reply Awaited.	Shri Nandakumar K. to share Alternate Mamber details for **Chemtrols Industries Ltd.** And contact details of the following organizations: 1. Vizag Steel 2. NALCO 3. MECON Limited, Ranchi Shri Mainak nandi to share contact details of **Pyrotech Electronics Private**. Mail will be sent to all non-participating organizations reconfirming their nominations. Dr Shiv Kumar Jaiswal to share updated nominations from **Institute for Design of Elec. Meas. Instruments.**

2.	Zener Barriers for intrinsically safe process control instruments	The committee decided that NTPC, in contact with EATON shall identify if any IEC is available, shall be adopted or Whether the standard needs to be withdrawn. The working group ETD 18-05 "Process Measurements with SignalTransmission" was asked to submit a report/ draft revision document before the next meeting to BIS so that the same can be discussed in the next meeting. Shri M. Suresh, FCRI informed that the standard should be retained with ETD 18 Sectional committee.	IS 10398: 1982 ''Zener barriers for intrinsically safe process control instrument'' was discussed at length. IS 10398 covers ***Safety*** and ***Design*** aspect part. Safety aspect part is already covered in IS/IEC 60079-11: 2011 and followed by almost all the manufacturers. The 'Design aspect' part does not have much use and not referred by Manufacturing Industries. 3φ isolators have replaced the Zener barriers in almost all the industries. IEC also doesn't have standard on Zener barriers. Zener barriers are obsolete and the standard can be withdrawn after obtaining confirmation from the relevant manufacturing. Shri Mainak Nandi, EIL to discuss the applicability of the Standard with the manufacturer. The decision on withdrawal of the IS 10398: 1982 will be taken in the next meeting after obtaining inputs from the manufacturers. If manufactures are still referring the 'Design aspect' part of IS 10398: 1982 and following IEC 60079: 2011 for Safety related compliances then the Safety related part can be removed from the IS 10398.

3.	Revision of the IS **9334 : 1986** and IS **8935 : 1985**	IS 9334 : 1986 Specification for electric motor operated actuators (*First Revision*) IS 8935 : 1985 Specification for electric solenoid operated actuators (*First Revision*) EIL and Emerson were given the task to assess the applicability of IEC 61010-2- 202 in the present Indian Scenario. Mail sent to EIL and EMERSON to provide their inputs. Shri **Mainak Nandi**, EIL informed that IEC **61010-2-202** is not a substitute for IS **9334**: **1986** and IS **8935:1985** as IEC 61010-2-202 mainly highlights the safety requirements and its associated testing of the actuators and SOVs, while the IS standards are more focused on the design and testing requirements of the actuators/SOVs. IEC-61010-2-202 is applicable even in Indian scenarios as it takes care of safety requirement. However, it is being observed that most of the Indian manufacturers of motor operated actuators and electrically operated SOVs are not referring the mentioned Indian standards in their design as per their published catalog. The applicability of Indian standards is required to be deliberated in Sectional committee meeting.	The committee decided to adopt and wide circulate the IEC **61010-2-202**. Members from the Emerson were requested to assess the applicability of IS **9334: 1986** and IS **8935: 1985.** It was also decided to send the email to relevant Industries to check whether they are referring the IS 9334: 1886 and IS 8935: 1985 or following the IEC 61010-2-202.

4.	New Subjects For Standard Formulation	Adoption of IEC standards from publications of IEC TC 65, 65 A,65 B Group ET 18-SM was also asked to study and examine the list for adoption, if any,for discussion in the next meeting. The committee asked Mr. Raju, Mr. Nanda Kumar and Mr Ramani Iyer to submit the refined list segregating the standards for various sub-groups to BISin 1-month time.	Committee deliberated upon adopting IEC standards related to smart manufacturing, smart cities etc. It was felt that inputs from manufacturing industries should be obtained while adopting IEC standards relevant to Indian scenario. Shri Nanda Kumar to share Manufacturing industries details. Members from Manufacturing industries will be included in Group ET 18-SM. Sub-committee meeting will be planned with the updated composition to discuss the IEC standards.
5.	Review ofIndian Standards For Revision/Reaffir mation -Industrial Electroheating standards	Emails sent to Bhillai Steel Plant to provide contact details of Durgapur Steel Plant (SAIL). Reply Awaited from all identified organizations. The subject was discussed at length andit was felt that this committee has no experts relevant to these set of standards. Hence, it was decided that Shri Ravinder Kumar Raina, Bharat Heavy Electricals Ltd. shall reach out to the concerned unit in BHEL to obtaininformation about use of these Industrial Electro heating standards within a month. If a lack of expertise and inputs is reported from his end, these standards shall be transferred to MTD or PGD. Reply Awaited from Shri Ravinder Kumar Raina, Bharat	It was decided to obtain inputs from SAIL regarding Industrial electro heating subject.

		Heavy Electricals Ltd.	
6.	InternationalActivities	Mr Raju was to make brief presentations on IEC 61508 and IEC 61511 and the progress of work in IEC.	Mr C. R. Raju updated the committee regarding the progress of work under IEC 61508 and IEC 61511. Shri Nanda Kumar to organize a meeting for presentation regarding the latest developments discussed during the 4 Day conference in Cietal. The decision on adopting the IEC will be taken after the presentation.
7.	**IS/IEC 62264 (Part 2): 2004** Enterprise - Control system integration: Part 2 object model attributes	The document has been sent into circulation as a P-draft for a period of 1 month. No comments received.	The committee decided to wide circulate the IEC for the period of 1 month. System Integration Industries Honeywell, ABB, Schneider, Yokogawa will be informed for their comments.

ITEM 2 PRESENT POSITION OF WORK OF ETD 18

2.1 The committee noted the information given in the agenda. The decision with respect to several Indian Standards in the Program of Work is listed in table below.

Sl. No.	**IS**	**Title**	**Decision Taken**
1.	IS/IEC 519-1 : 1984	Safety in electroheat installation Part 1 general requirements	Committee decided to Wide circulate the IEC for the period of 1 month
2.	IS/IEC 519-3 : 1988	Safety in electroheat installations Part 3 particular requirements for induction and conduction heating and induction melting installations	Committee decided to Wide circulate the IEC for the period of 1 month
3.	IS/IEC 1131-2 : 1992	Programmable controllers Part 2 equipment requirements and tests	Committee decided to Wide circulate the IEC for the period of 1 month

4.	IS/IEC 1308 : 1994 IEC 61308 : 1994	High frequency dielectric heating installations - Test methods for the determination of power output	Committee decided to Wide circulate the IEC for the period of 1 month
5.	IS/IEC 519-5 : 1980	Safety in electroheat installation Part 5 specification for safety in plasma installation	Committee decided to withdraw the standard as base IEC 60519-5: 1980 has been withdrawn.
6.	IS/IEC 519-9 : 1987	Safety in electroheat installations Part 9 particular requirements for high - Frequency dielectric heating installations	Base IEC 60519-9: 1987 has been replaced by IEC 60519-6: 2022. Committee decided to wide circulate the IEC for the period of 1 month.
7.	IS 5883 : 1970	Specification for nickel resistance thermometer elements	Since the manufacturing and usage of nickel resistance thermometer elements is minimal in the country in recent times and platinum resistance RTDs are being used predominantly in almost all the industrial applications. The committee decided to withdraw the standard.
8.	IS 2848: 1986	Specification for industrial platinum resistance thermometer sensors First Revision	The committee decided to revise and align the standard with **IEC 60751:2008**. IEC will be wide circulated for the period of 1 month.
7.	IS 6720 : 1972	Reference tables for platinum 30 percent rhodium - Platinum 6 percent rhodium thermocouples	Committee decided to supersede the standard with IEC 60584-1: 2013 and IEC 60584-3: 2021. IEC 60584-1: 2013 already adopted in ETD 18. IEC 60584-3: 2014 will be wide circulated for the period of 1 month.
10.	IS 4309 : 1979	Methods of measurement on direct reading PH meters First Revision	IEC publications will be shared with all the member to check the relevant IEC standards to revise Indian Standards. It was decided to seek opinions from Emerson, Forbes and Yokogawa IA Technologies India Private Limited to revise these standards.
11.	IS 6804 : 1972	Specification for glass electrodes for direct reading pH meter	
12.	IS 8018 : 1976	Specification for platinum and platinum alloy wires for thermocouple elements	
13.	IS 10189 (Part 2/Sec 1) : 1993	Industrial process control valves Part 2 flow capacity Sec 2 sizing equations for compressible fluid flow under installed conditions	IS 10189 (Part 2/Sec 1) : 1993 is Modified/Technically Equivalent of Base IEC: IEC Pub 534 - 2 : 1978
14.	IS 10189 (Part 2/Sec 2) : 1993	Industrial process control valves Part 2 flow capacity Sec 2 sizing equations for compressible fluid	IS 10189 (Part 2/Sec 2) : 1993 is Modified/Technically Equivalent of IEC Publication 534-2-2 (1980)

		flow under installed conditions	Both International standards have been replaced by IEC: IEC 60534-2-1:2011. It was decided to seek opinions from FCRI to revise both Indian Standards.

ITEM 3 REVIEW OF COMPOSITION OF BASIC ELECTROTECHNICAL STANDARDS AND POWER QUALITY SECTIONAL COMMITTEE, ETD 01

3.1 The committee reviewed the composition. It was requested to all the participants to inform BIS regarding any change in their current organization. It was decided to send the mail to all non-participating organizations to reconfirm their nominations.

ITEM 4 INTERNATIONAL ACTIVITIES

4.1 The committee noted the information given in the agenda. Members are requested to review the information given in Annex 4 of Agenda (*POW of IEC TC*) and send inputs via email.

4.2 The committee discussed the Proposal for transferring the working groups of IEC TC 65 (Industrial-process measurement, control, and automation) from ETDC to LITDC. The scope of relevant LITD committee will be shared with the members to review the proposal. Due to lack of expertise in the meeting, inputs from the manufacturing industries will be obtained on the above proposal. A sub-group meeting with experts of LITD will be planned to discuss the proposal.

ITEM 5 IMPLEMENTATION STATUS OF INDIAN STANDARDS

The committee noted the information given in the Agenda.

ITEM 6 TRAINING PROGRAMME

The Committee noted the information about NITS which has been setup by BIS to provide quality platform to various organization who might need assistance for their personnel to achieve quality in their field.

ITEM 7 ANY OTHER BUSINESS

ITEM 8 DATE AND PLACE OF NEXT MEETING

The following timelines were decided:

ETD 18: Dec 2022 (in consultation with chairman)