



## **BUREAU OF INDIAN STANDARDS**

### **AGENDA**

#### **12th MEETING OF ELECTRONIC MEASURING INSTRUMENTS, SYSTEMS AND ACCESSORIES SECTIONAL COMMITTEE, LITD 08**

**(Hybrid Meeting)**

<b>Date &amp; Time</b>	09 <sup>th</sup> August 2024 Time : 10:30 hrs
<b>Venue</b>	Anushilan (Copper room) Manak Bhawan, BIS Headquarter, New Delhi, India
<b>Meeting link</b>	<a href="https://bismanak.webex.com/bismanak/j.php?MTID=me45487ceb9608c31d938e343853b4148">https://bismanak.webex.com/bismanak/j.php?MTID=me45487ceb9608c31d938e343853b4148</a>
<b>Meeting ID</b>	2519 113 5141
<b>Password</b>	8@12

**Chairperson:** Shri Atul Gupta, Scientist 'G', STQC

**Member Secretary:** Shri Priyanshu Sharma, Scientist 'C', BIS

#### **ITEM 0 WELCOME**

- 0.1** Welcome by the Member Secretary
- 0.2** Opening remarks by the Chairperson

#### **ITEM 1 FORMAL CONFIRMATION OF THE MINUTES OF THE LAST MEETING**

- 1.1** The minutes of the 11th meeting of "Electronic Measuring Instruments, Systems and Accessories" Sectional Committee, LITD 08, which was held on 27 October 2023, were circulated. No comments have been received.

***THE COMMITTEE MAY FORMALLY CONFIRM THE MINUTES.***

#### **ITEM 2 SCOPE AND COMPOSITION COMMITTEE**

- 2.1** The Scope and composition of LITD 08 is given in [Annex 1](#).
- 2.2** Co-option requests have been received from the following Organizations/Institutes:
  - **Secure Meters Limited** – Mr. Lokesh Kumar Gupta, Detailed CV is given in Annex-2
  - **Socomec Innovative Power Solutions**– Mr. Pradeep Gupta, Detailed CV is given in Annex-

- **Gujarat Technological University** – Dr. Makwana Gautam Durlabhji, Detailed CV is given in Annex-2
- **Terre Armee India, New Delhi** – Dr. Anand Hulagabali, Detailed CV is given in Annex-2

### 2.3 Revised nominations have been received from the following organizations:

1. **Bhabha Atomic Research Centre, Mumbai** - Dr. Sourav Mukhopadhyay (P), Ms. Kum. Diana Denice (A) and Mr. Abhimanyu Chowdhury (A).
2. **Ashbee Systems Limited, New Delhi** - Mr. Ashish Bhutani (P), Ms. Neelam Ghai (A) and Shri Tamal Nath (A)

### 2.4 Nominations have been received from the following organization after letter for co-option was written:

1. **The Singareni Collieries Company Limited, Kothagudem** - Mr. Chithuri Srinivas (P), Mr. Vadloori Anvesh Kumar (A) and Mr. Enugula Vijayapal (A)

## THE COMMITTEE MAY REVIEW THE SCOPE & COMPOSITION

### ITEM 3 REVIEW OF PUBLISHED/UNDER DEVELOPMENT STANDARDS

#### 3.1 Review of Published Standards

In accordance with BIS procedures, Indian Standards which are in existence for more than 3 years are to be reviewed for reaffirmation/revision/withdrawal. The committee may also review the following standard since it is due in 2024-25, the latest status along with International standard on which this is based is provided below:

SI No	IS No.	Title	Review due on	Base Standard	Committee decision during the last meeting	Secretariat Remarks
1.	IS 3437 : 1972	General requirements for direct reading pointer indicator type electronic voltmeter (First Revision)	August, 2023	IEC 217 : 1967	-	1. The base standard has been withdrawn 2. Secure Meters/ECIL/BEL experts may review the standard.
2.	IS 14989 : 2001	Recommended practices for seismic qualification of electrical equipment of the safety system for nuclear generating stations	July, 2017	IEC 60980	-	1. The base standard has been revised by IEC/IEEE 60980-344:2020
3.	IS 13875 (Part 1) : 1993	Digital measuring instruments for measurement and control: Part 1 general specifications concerning terms Tests and data sheet details	July, 2023	IEC 66(SEC) 49	-	Secure Meters/ECIL/BEL experts may review the standard.

4.	IS 13875 (Part 2) : 1993	Digital measurement instruments for measurement and control: Part 2 terms test and data sheet details of instruments for measuring analog quantities	July, 2023	IEC 66(SEC) 50	-	Secure Meters/ECIL/BEL experts may review the standard.
5.	IS 13875 (Part 3) : 1993	Digital measuring instruments for measurement and control: Part 3 terms, tests and data sheet details of instruments for measuring digital quantities	July, 2023	IEC 66(SEC) 51	-	-
6.	IS 13897 : 1993	In - Core instrumentation for neutron fluence rate (Flux) measurements in power reactors	July, 2023	IEC 60568	-	The base standard has been revised by IEC 60568:2006
7.	IS 14189 : 1994	Expression of properties of frequency counters (Up to a frequency of 1 GHz)	July, 2023	Indigenous	-	1. It is Pre -2000 Standard. 2. BARC experts may review the standard.
8.	IS 14501 (Part 2) : 1998	Pulse techniques and apparatus: Part 2 pulse measurement and analysis, general considerations	July, 2023	IEC 60469-2	-	The base standard has been revised by IEC 60469:2013
9.	IS 1885 (Part 47) : 1977	Electrotechnical vocabulary: Part 47 digital electronic equipment	July, 2023	IEC 60485 : 1974	-	1. The base standard IEC 60485 : 1974 has been withdrawn. 2. It is proposed to reaffirm the standard.
10.	IS 1885 (Part 63) : 1985	Electrotechnical vocabulary: Part 63 nuclear instrumentation	July, 2023	IEC 60050-391(1975)	-	The base standard has been revised by IEC 60050-395:2014
11.	IS 2320 : 1963	Methods of measurements for amplitude modulated radio frequency signal generators (30 Kc/s To 30 Mc/s)	July, 2023	IEC 60106	(IEC 60106:1959 Withdrawn, IEC 60106:1974/AMD1:1983 Withdrawn, CISPR 32:2015+A MD1:2019 CSV Consolidated version)	Experts from Prasar Bharti & DoT may review this standard. Also, revision may be taken up in latest style and format

					The committee decided to consult Prasar Bharti for review of this standard.	
12.	IS 2321 : 1963	Requirements for general purpose amplitude modulated radio frequency signal generators (30 Kc/s To 30 Mc/s)	July, 2023	Indigenous	-	1. Pre -2000 Standard 2. Experts from Prasar Bharti & DoT may review this standard.
13.	IS 3886 : 1966	Minimum requirements for general purpose audio frequency signal generators (30 C/s To 30 Kc/s)	July, 2023	Indigenous	-	1. Pre -2000 Standard 2. The committee may identify relevant industry & request Prasar Bharti & DoT for review of this standard.
14.	IS 3915 : 1966	Methods of measurements on audio frequency signal generators (30 C/s To 30 Kc/s)	July, 2023	Indigenous	-	1. Pre -2000 Standard 2. The committee may identify relevant industry & request Prasar Bharti & DoT for review of this standard.
15.	IS 4330 : 1967	Methods of measurements on cathode - Ray oscilloscope (DC To 10 Mc/s)	July, 2023	Indigenous	-	1. Pre -2000 Standard 2. The committee may identify relevant industry & request Prasar Bharti & DoT for review of this standard.
16.	IS 4755 : 1987	Reference zero for the calibration of pure tone air conduction audiometers (First Revision)	July, 2023	ISO 389-1985	-	The base standard has been revised by ISO 389-1:2017
17.	IS 6700 : 1972	Requirements for general purpose cathode - Ray oscilloscope	July, 2023	Indigenous	-	1. Pre -2000 Standard 2. Kistler experts may review this standard.
18.	IS 6767 (Part 1) : 1972	Specification for direct reading pointer indicator type AC/DC electronic voltmeter: Part 1 methods of measurements	July, 2023	Indigenous	-	1. Pre -2000 Standard. 2. ECIL/BEL experts may review this standard.
19.	IS 6767 (Part 3) : 1972	Specification for direct reading pointer indicator type AC/DC electronic voltmeter: Part 3 up to 300 MHz	July, 2023	IEC 60217 : 1967	-	ECIL/BEL experts may review this standard.
20.	IS 6769 (Part 1) : 1972	Specification for direct reading pointer indicator type ac electronic millivoltmeter: Part 1 methods of measurements	July, 2023	Indigenous	-	1. Pre -2000 Standard 2. ECIL/BEL experts may review this standard

21.	IS 6769 (Part 2) : 1972	Specification for direct reading pointer indicator type ac electronic millivoltmeter: Part 2 with a frequency range of 2 Hz to 1 MHz	July, 2023	Indigenous	-	<ol style="list-style-type: none"> <li>1. Pre -2000 Standard</li> <li>2. ECIL/BEL experts may review this standard</li> </ol>
22.	IS 8290 : 1976	Specification for general purpose audio frequency output power meters	July, 2023	Indigenous	-	<ol style="list-style-type: none"> <li>1. Pre -2000 Standard</li> <li>2. Secure Meters experts may review this standard.</li> </ol>
23.	IS 8573 : 1977	Specification for digital electronic DC voltmeters and dc electronic analogue - To - Digital converters	July, 2023	IEC 60 485-1974	-	<ol style="list-style-type: none"> <li>1. The base standard IEC 60485-1974 has been withdrawn</li> <li>2. To identify if any ISO/IEC standard has superseded this standard.</li> </ol>
24.	IS 9177 : 1979	Method for specifying the functional performance of stabilized power supply apparatus	July, 2023	IEC 60443 : 1974	-	<ol style="list-style-type: none"> <li>1. The base standard IEC 60443 : 1974 has been withdrawn</li> <li>2. To identify if any ISO/IEC standard has superseded this standard.</li> </ol>
25.	IS 9281 (Part 1) : 1979	Specification for electronic weighing systems: Part 1 terms and definitions	July, 2023	Indigenous	The committee decided to constitute a panel with Legal metrology department for review of these standards	Discussions were held with Director (Legal Metrology) on this subject. It was agreed to formulate a dedicated Panel with the leadership of Legal Metrology department for thorough review of IS 9281 series of standards, in line with the Legal Metrology Act. Based on the panel's recommendation, the committee may further decide in the future meetings. Committee may discuss if any other experts should be involved in this Panel.
26.	IS 9281 (Part 2) : 1979	Specification for electronic weighing systems: Part 2 methods of measurements	July, 2023	Indigenous	The committee decided to constitute a panel with Legal metrology department for review of these standards	
27.	IS 9281 (Part 3) : 1981	Specification for electronic weighing systems: Part 3 requirements	July, 2023	Indigenous	The committee decided to constitute a panel with Legal metrology department	

					for review of these standards	
28.	IS 9281 (Part 4) : 1983	Specification for electronic weighing systems: Part 4 code of practice for use and installation	July, 2023	Indigenous	The committee decided to constitute a panel with Legal metrology department for review of these standards	
29.	IS 9285 (Part 1) : 1979	Specification for direct reading pointer indicator type AC electronic RF millivoltmeter: Part 1 methods of measurements	July, 2023	Indigenous	-	1. Pre -2000 Standard 2. ECIL/BEL experts may review this standard.
30.	IS 9285 (Part 2) : 1979	Specification for direct reading pointer indicator type AC electronic RF millivoltmeter: Part 2 requirements	July, 2023	Indigenous	-	1. Pre -2000 Standard 2. ECIL/BEL experts may review this standard
31.	IS 9298 (Part 1) : 1979	Specification for television pattern generators: Part 1 requirements	July, 2023	Indigenous	-	1. Pre -2000 Standard 2. ECIL experts may review this standard.
32.	IS 9298 (Part 2) : 1980	Specification for television pattern generators: Part 2 methods of measurements	July, 2023	Indigenous	-	1. Pre -2000 Standard 2. ECIL experts may review this standard.
33.	IS 9711 : 1980	Specification for synchronizing pulse generator	July, 2023	Indigenous	-	1. Pre -2000 Standard 2. CEERI – Pilani to be co-opted for review this standard.
34.	IS 9741 (Part 1) : 1981	Specification for video test signal generator: Part 1 methods of measurements	July, 2023	Indigenous	-	1. Pre -2000 Standard 2. CEERI – Pilani to be co-opted for review this standard.
35.	IS 9741 (Part 2) : 1981	Specification for video test signal generator: Part 2 requirements	July, 2023	Indigenous	-	1. Pre -2000 Standard 2. CEERI – Pilani to be co-opted for review this standard.
36.	IS 9782 : 1981	Specification for television sweep generators	July, 2023	Indigenous	-	1. Pre -2000 Standard 2. CEERI – Pilani to be co-opted for review this standard.
37.	IS 9858 : 1981	Safety requirements for electronic measuring apparatus	July, 2023	IEC 60348 : 1978	-	1. SUPERSEDED by IEC 61010-1:2010/AMD1:2016/COR1:2019

						2. CEERI – Pilani to be co-opted for review this standard
38.	IS 15398 : 2003	Software for computers in the safety systems of nuclear and radiation facilities	July, 2023	IEC 60880	-	The base standard has been revised by IEC 60880:2006
39.	IS 15399 : 2003	Hardware for computers in the safety system of nuclear and radiation facilities	July, 2023	IEC 60987	-	The base standard has been revised by IEC 60987:2021
40.	IS 6756 : 2001	Electrical and electronic measuring equipment – Documentation (First Revision)	July, 2023	Indigenous	-	1. This standard is Due for review in 24-25. 2. Kistler experts may review this standard
41.	IS 10767 (Part 1) : 2018	Higher performance protocol for the standard digital interface for programmable instrumentation: Part 1 general (Second Revision)	July, 2024	IEC 60488-1 : 2004	-	1. Due for review in 24-25. No change in base standard. The committee may review. 2. It is proposed to reaffirm the standard.
42.	IS 10767 (Part 2) : 2018	Standard digital interface for programmable instrumentation: Part 2 codes, formats, protocols and common commands (Second Revision)	July, 2024	IEC 60488-2 :2004	-	1. Due for review in 24-25. No change in base standard. The committee may review. 2. It is proposed to reaffirm the standard
43.	IS 11424 : 2018	Nuclear instrumentation - Portable gamma radiation meters and spectrometers used for prospecting - Definitions, requirements and calibration (First Revision)	July, 2024	IEC 61239 : 1993	-	1. Due for review in 24-25. No change in base standard. The committee may review. 2. It is proposed to reaffirm the standard
44.	IS 11797 : 2018	Nuclear power plants - Instrumentation important to safety - Radiation detectors - Characteristics and test methods (First Revision)	July, 2024	IEC 60515 : 2007	-	1. Due for review in 24-25. No change in base standard. The committee may review. 2. It is proposed to reaffirm the standard
45.	IS 11866 : 2018	Radiation protection instrumentation - Alpha, beta and alpha/beta (Beta Energy > 60 KeV) contamination meters and monitors (First Revision)	July, 2024	IEC 60325 : 2002	-	1. Due for review in 24-25. No change in base standard. The committee may review. 2. It is proposed to reaffirm the standard
46.	IS 11868 : 2018	Nuclear instrumentation - Constructional requirements and classification of	July, 2024	IEC 62598 : 2011	-	1. Due for review in 24-25. No change in base standard. The committee may review. 2. It is proposed to reaffirm the standard

		radiometric gauges (First Revision)				
47.	IS 12761 (Part 1) : 2018	Equipment for continuous monitoring of radioactivity in gaseous effluents: Part 1 general requirements (First Revision)	July, 2024	IEC 60761-1: 2002	-	<ol style="list-style-type: none"> <li>1. Due for review in 24-25. No change in base standard. The committee may review.</li> <li>2. It is proposed to reaffirm the standard</li> </ol>
48.	IS 12761 (Part 2) : 2018	Equipment for continuous monitoring of radioactivity in gaseous effluents: Part 2 specific requirements for radioactive aerosol monitors including transuranic aerosols (First Revision)	July, 2024	IEC 60761-2: 2002	-	<ol style="list-style-type: none"> <li>1. Due for review in 24-25. No change in base standard. The committee may review.</li> <li>2. It is proposed to reaffirm the standard.</li> </ol>
49.	IS 12761 (Part 3) : 2018	Equipment for continuous monitoring of radioactivity in gaseous effluents: Part 3 specific requirements for radioactive noble gas monitors (First Revision)	July, 2024	IEC 60761-3:2002	-	<ol style="list-style-type: none"> <li>1. Due for review in 24-25. No change in base standard. The committee may review.</li> <li>2. It is proposed to reaffirm the standard</li> </ol>
50.	IS 12761 (Part 4) : 2018	Equipment for continuously monitoring radioactivity in gaseous effluents: Part 4 specific requirements for Radioactive Iodine Monitors ( First Revision )	July, 2024	IEC 60761-4:2002		<ol style="list-style-type: none"> <li>1. Due for review No change in base standard. The committee may review.</li> <li>2. It is proposed to reaffirm the standard</li> </ol>
51.	IS 14481 (Part 1) : 2018	Nuclear power plants - Instrumentation important to safety - Radiation monitoring for accident and post - Accident conditions: Part 1 general requirements	July, 2024	IEC 60951-1 : 2009		<p>Due for review in 24-25.</p> <p>The base standard has been revised by IEC 60951-1:2022. Revision may be taken up in line with the 2022 version.</p>
52.	IS 14888 : 2000	VSWR meter - Performance requirements	July, 2024	Indigenous	-	<ol style="list-style-type: none"> <li>1. Due for review in 24-25.</li> <li>2. SOCOMEC experts may review this standard.</li> </ol>
53.	IS 9176 : 2018	Electrical and electronic measurement equipment - Expression of performance (Second Revision)	July, 2024	Indigenous	-	<ol style="list-style-type: none"> <li>1. Due for review in 24-25.</li> <li>2. Kistler experts may review this standard.</li> </ol>
54.	IS 13109 (Part 12) : 2014	Electronic equipment/systems for use in coal and metalliferous mines - Specification: Part 12 requirements for cable fault locators	November, 2023	Indigenous	-	<ol style="list-style-type: none"> <li>1. Due for review in 24-25.</li> <li>2. SCCL experts may review this standard.</li> </ol>



55.	IS/IEC 60469 : 2013	Transitions, Pulses and Related Waveforms Terms, Definitions and Algorithms	October , 2024	IEC 60469 : 2013	-	<ol style="list-style-type: none"> <li>1. Due for review in 24-25. No change in base standard. The committee may review.</li> <li>2. SCCL experts may review this standard.</li> </ol>
-----	---------------------	-----------------------------------------------------------------------------	----------------	------------------	---	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

### 3.2 Decisions taken with respect to review of Indian standards is given in the following table:

Sl No	IS no	Title	Status	Remarks	Decision	Action taken by Secretariat
1.	IS 12930 : 1991 IEC 60231 Identical under dual numbering	General principles of nuclear reactor instrumentation	IEC 60231:1967 no change we may reaffirm.	There is no change in base standard IEC 60231:1967, we may revise the standard in the latest style and format of Indian standards.	(i) The committee decided to reaffirm this standard till revision in the latest style and format of Indian standards.	<ol style="list-style-type: none"> <li>1. The standard was formally Reaffirmed</li> <li>2. Relevant experts of LITD 08 (from DAE) may review the standard.</li> </ol>
3.	IS 13881 : 1993 IEC 60973 Identical under dual numbering	Test procedures for germanium gamma - Ray detectors	IEC 60973:1989 no change	Since no change is base standard, we may revise the standard in latest style and format of Indian standards.	i) The committee decided to reaffirm this standard till revision in latest style and format of Indian standards	<ol style="list-style-type: none"> <li>1. The standard was formally Reaffirmed</li> <li>2. Relevant experts of LITD 08 (from DAE) may review the standard.</li> </ol>
3.	IS 10211 (Part 1) : 1982 Indigenous	Specification for standard signal generator in the frequency range 30 MHz to 500 MHz: Part 1 methods of measurements	It is product standard.	It is requested that the members may examine and give comments on reaffirm, revise and withdraw the standard.	(i) The committee decided to reaffirm this standard till revision in the latest style and format of Indian standards.	The standard was formally Reaffirmed
4.	IS 10211 (Part 2) : 1982 Indigenous	Specification for standard signal generator in the frequency range 30 MHz to 500 MHz: Part 2 performance requirements		It is requested that the members may examine and give comments on reaffirm, revise and withdraw the standard.	(i) The committee decided to reaffirm this standard till revision in the latest style and format of Indian standards.	The standard was formally Reaffirmed
5.	IS 10656 :	Specification		It is requested	(i) The committee	i) The standard was

	1983 Indigenous	for insulation resistance tester (Electronic Type)		that the members may examine and give comments on reaffirm, revise and withdraw the standard.	decided to reaffirm this standard till revision in the latest style and format of Indian standards. (ii) To be circulated to Dr Sandip Pal for Review (iii) To check the licenses of this Standard	formally Reaffirmed  ii) This is not circulate to Dr. Sandip Pal for Review  iii) No licenses issue of this standard
6.	IS 11018 (Part 1) : 1984 IEC 60351-1: 1976 Identical under dual numbering	Expression of the properties of cathode - Ray oscilloscopes: Part 1 general	IEC 60351- 1:1976 Withdrawn	Base standard IEC 60351- 1:1976 is Withdrawn, it is recommended for withdrawal.	(i) The committee decided to reaffirm this standard till revision in the latest style and format of Indian standards. (ii) M/s Scientific Mes- Technik Private Limited can be co-opted for their expertise in these standards. (iii) Dr Sandip Pal will be requested to provide a point of contact for Scientific Mes Technik Private Limited.	1. The standard was formally Reaffirmed 2. Relevant experts of LITD 08 (from DAE) may review the standard.
7.	IS 11018 (Part 2) : 1984 IEC 60351-2: 1976 Identical under dual numbering	Expression of the properties of cathode - Ray oscilloscopes: Part 2 storage oscilloscopes	IEC 60351- 2:1976 Withdrawn	Base standard IEC 60351- 2:1976 is Withdrawn, it is recommended for withdrawal.	(i) The committee decided to reaffirm this standard till revision in the latest style and format of Indian standards. (ii) M/s Scientific Mes- Technik Private Limited can be co-opted for their expertise in these standards. (iii) Dr Sandip Pal will be requested to provide point of contact for Scientific Mes	1. The standard was formally Reaffirmed 2. Relevant experts of LITD 08 (from DAE) may review the standard.

					Technik Private Limited.	
8.	IS 12421 : 1988 Modified/Technically Equivalent	Performance verification of liquid scintillation counting systems	equivalent standards ANSI N42-15- 1980	It is requested that the members may examine and give comments on reaffirm, revise and withdrawal of standard.	(i) The committee decided to reaffirm this standard till revision in the latest style and format of Indian standards.	The standard was formally Reaffirmed
9.	IS 12705 : 1989 Modified/Technically Equivalent	Expression of performance of air quality infra - Red, analyzers	Base standard IEC 60528:1975 no change	To revise IS 12705: 1989 in latest style and format of Indian standards.	(i) The committee decided to reaffirm this standard till revision in the latest style and format of Indian standards.	1. The standard was formally Reaffirmed 2. Relevant experts of LITD 08 (from DAE) may review the standard.
10.	IS 12737 : 1988 IEC 60759 Identical under dual numbering	Standard test procedures for semiconductor X - Ray energy spectrometers	There is amendment in base standard IEC 60759	To revise IS 12737: 1988 in latest style and format of Indian standards incorporating Amd 1 issued by IEC.	(i) The committee decided to reaffirm this standard till revision in the latest style and format of Indian standards.	1. The standard was formally Reaffirmed 2. Relevant experts of LITD 08 (from DAE) may review the standard.
<del>11.</del>	<del>IS 12772 : 2003 Modified/Technically Equivalent</del>	<del>Application of computers to nuclear reactor instrumentation and control (First Revision)</del>	<del>Based on IEC 60643 AND IEC 61226. IEC 60643:1979 Withdrawn and IEC 61226:2020 updated.</del>	To revise standards in line with IEC 61226:2020.	(i) The committee decided to withdraw this standard and to adopt IEC 61226:2020. (ii) It was suggested to find relevant standards which may have replaced IEC 60643:1979 (iii) Shri Animesh Biswas from AERB Smt K Kameswari from IGCAR and BARC may be contacted to find relevant IEC standards	<del>i) The standard has been withdrawn and</del> IS/IEC 61226:2020 is currently under wide circulation.
12.	IS 12857 : 1989 IEC 60416 Identical under dual numbering	General principles for the creation of graphical symbols for use on	IEC 60416:1988 Withdrawn	Base standard IEC 60416:1988 is Withdrawn, it is recommended for withdrawal.	(i) The committee decided to reaffirm this standard. (ii) May be replaced by ISO	The standard was formally Reaffirmed

		equipment			7000/ IEC 60417 or ANSI/ISA 5.5 may be adopted after discussion.	
13.	IS 12957 : 1990 Modified/Technically Equivalent	Expression of performance of sample handling systems for fluids	based on IEC 66D(C.O.)12	It is requested that the members may examine and give comments on reaffirm, revise and withdrawal of standard.	(i) The committee decided to reaffirm this standard.	The standard was formally Reaffirmed
14.	IS 13109 (Part 1) : 1991	Specification for electronic equipment/systems for use in coal and metallic ferrous mines: Part 1 definitions, general requirements and tests	-	It is requested that the members from mining may examine and give comments on reaffirm, revise and withdrawal of standards.	(i) The committee decided to reaffirm this standard.	The standard was formally Reaffirmed
15.	IS 13109 (Part 2) : 1991	Specification for electronic equipment/systems for use in coal and metalliferous mines: Part 2 requirements for automatic telephone systems	-	-do-	(i) The committee decided to reaffirm this standard.	The standard was formally Reaffirmed
16.	IS 13109 (Part 3) : 1999	Specification for electronic equipment/systems for use in coal and metalliferous mines: Part 3 requirements for battery powered amplifier telephone systems	-	-do-	(i) The committee decided to reaffirm this standard.	The standard was formally Reaffirmed
17.	IS 13109 (Part 4) : 1991	Specification for electronic equipment/systems for use in coal and	-	do-	The Committee decided i) to Co-opt DGMS, Dhanbad Industry BCCL, SCCL for	i) Co-option letters were written to DGMS, BCCL & SCCL. Nominations received

		metallic ferrous mines: Part 4 requirements for sound powered magneto telephone systems			<p>their inputs.</p> <p>(ii) to consult DDG, Electrical form DGMS, Dhanbad for review of this standard</p> <p>(iii) to request Dr RK Vishwakarma to provide point of contact for DGMS, Dhanbad</p> <p>(iv) to reaffirm this standard.</p>	<p>from SCCL &amp; BCCL. Response awaited from DGMS.</p> <p>ii) Response awaited from DGMS.</p> <p>iii) Dr RK Vishwakarma may provide point of contact for DGMS, Dhanbad</p> <p>iv) The standard has been formally Reaffirmed</p>
18.	IS 13109 (Part 5) : 1991	Specification for electronic equipment/systems for use in coal and metallic ferrous mines: Part 5 requirements for loud hailing telephone systems	-	do-	<p>The Committee decided</p> <p>i) to Co-opt DGMS, Dhanbad Industry BCCL, SCCL for their inputs.</p> <p>(ii) to consult DDG, Electrical form DGMS, Dhanbad for review of this standard</p> <p>(iii) to request Dr RK Vishwakarma to provide point of contact for DGMS, Dhanbad</p> <p>(iv) to reaffirm this standard.</p>	<p>i) Co-option letters were written to DGMS, BCCL &amp; SCCL. Nominations received from SCCL &amp; BCCL. Response awaited from DGMS.</p> <p>ii) Response awaited from DGMS.</p> <p>iii) Dr RK Vishwakarma provided point of contacts</p> <p>iv) The standard has been formally Reaffirmed</p>
19.	IS 13109 (Part 6) : 1991	Specification for electronic equipment/systems for use in coal and metallic ferrous mines: Part 6 requirements for leaky feeder communication systems	-	do-	<p>The Committee decided</p> <p>i) to Co-opt DGMS, Dhanbad Industry BCCL, SCCL for their inputs.</p> <p>(ii) to consult DDG, Electrical form DGMS, Dhanbad for review of this standard.</p>	<p>i) Co-option letters were written to DGMS, BCCL &amp; SCCL. Nominations received from SCCL &amp; BCCL. Response awaited from DGMS.</p> <p>ii) Response awaited from DGMS.</p> <p>iii) Dr RK</p>

					<p>(iii) to request Dr RK Vishwakarma to provide point of contact for DGMS, Dhanbad</p> <p>(iv) to reaffirm this standard.</p>	<p>Vishwakarma may provided point of contacts</p> <p>iv) The standard has been formally Reaffirmed</p>
20.	IS 13109 (Part 7) : 1991	Specification for electronic equipment/systems for use in coal and metallic ferrous mines: Part 7 requirements for cage communication systems	-	-do-	<p>The Committee decided</p> <p>i) to Co-opt DGMS, Dhanbad Industry BCCL, SCCL for their inputs.</p> <p>(ii) to consult DDG, Electrical form DGMS, Dhanbad for review of this standard.</p> <p>(iii) to request Dr RK Vishwakarma to provide point of contact for DGMS, Dhanbad</p> <p>(iv) to reaffirm this standard.</p>	<p>i) Co-option letters were written to DGMS, BCCL &amp; SCCL. Nominations received from SCCL &amp; BCCL. Response awaited from DGMS.</p> <p>ii) Response awaited from DGMS.</p> <p>iii) Dr RK Vishwakarma may provided point of contacts</p> <p>iv) The standard has been formally Reaffirmed</p>
21.	IS 13109 (Part 8) : 1999	Specification for electronic equipment/systems for use in coal and metalliferous mines: Part 8 requirements for radio paging systems	-	-do-	<p>The Committee decided</p> <p>i) to Co-opt DGMS, Dhanbad Industry BCCL, SCCL for their inputs.</p> <p>(ii) to consult DDG, Electrical form DGMS, Dhanbad for review of this standard.</p> <p>(iii) to request Dr RK Vishwakarma to provide point of contact for DGMS, Dhanbad</p> <p>(iv) to reaffirm this standard.</p>	<p>i) Co-option letters were written to DGMS, BCCL &amp; SCCL. Nominations received from SCCL &amp; BCCL. Response awaited from DGMS.</p> <p>ii) Response awaited from DGMS.</p> <p>iii) Dr RK Vishwakarma may provided point of contacts</p> <p>iv) The standard has been formally Reaffirmed</p>

22.	IS 13109 (Part 9) : 2000	Specification for electronic equipment/systems for use in coal and metalliferous mines: Part 9 requirements for insulation resistance testers	-	do-	<p>The Committee decided</p> <p>i) to Co-opt DGMS, Dhanbad Industry BCCL, SCCL for their inputs.</p> <p>(ii) to consult DDG, Electrical form DGMS, Dhanbad for review of this standard.</p> <p>(iii) to request Dr RK Vishwakarma to provide point of contact for DGMS, Dhanbad</p> <p>(iv) to reaffirm this standard</p>	<p>i) Co-option letters were written to DGMS, BCCL &amp; SCCL. Nominations received from SCCL &amp; BCCL. Response awaited from DGMS.</p> <p>ii) Response awaited from DGMS.</p> <p>iii) Dr RK Vishwakarma may provided point of contacts</p> <p>iv) The standard has been formally Reaffirmed</p>
23.	IS 13109 (Part 10/Sec 1) : 1991	Specification for electronic equipment/systems for use in coal and metallic ferrous mines: Part 10 requirements for monitoring systems: Sec 1 production monitoring systems	-	-do-	<p>The Committee decided</p> <p>i) to Co-opt DGMS, Dhanbad Industry BCCL, SCCL for their inputs.</p> <p>(ii) to consult DDG, Electrical form DGMS, Dhanbad for review of this standard.</p> <p>(iii) to request Dr RK Vishwakarma to provide point of contact for DGMS, Dhanbad</p> <p>(iv) to reaffirm this standard</p>	<p>i) Co-option letters were written to DGMS, BCCL &amp; SCCL. Nominations received from SCCL &amp; BCCL. Response awaited from DGMS.</p> <p>ii) Response awaited from DGMS.</p> <p>iii) Dr RK Vishwakarma may provided point of contacts</p> <p>iv) The standard has been formally Reaffirmed</p>
24.	IS 13109 (Part 10/Sec 2) : 1991	Specification for electronic equipment/systems for use in coal and: Part 10	-	-do-	<p>The Committee decided</p> <p>i) to Co-opt DGMS, Dhanbad Industry BCCL, SCCL for their</p>	<p>i) Co-option letters were written to DGMS, BCCL &amp; SCCL. Nominations received from SCCL &amp; BCCL.</p>

		metallic ferrous mines requirements - For monitoring systems: Sec 2 status monitoring systems			inputs.  (ii) to consult DDG, Electrical form DGMS, Dhanbad for review of this standard.  (iii) to request Dr RK Vishwakarma to provide point of contact for DGMS, Dhanbad  (iv) to reaffirm this standard.	Response awaited from DGMS.  ii)Response awaited from DGMS.  iii) Dr RK Vishwakarma may provided point of contacts  iv) The standard has been formally Reaffirmed
25.	IS 13109 (Part 11) : 2000	Specification for electronic equipment/ systems for use in coal and metalliferous mines: Part 11 requirements for goaf temperature monitoring systems	-	-do-	The Committee decided: i) to Co-opt DGMS, Dhanbad Industry BCCL, SCCL for their inputs.  (ii) to consult DDG, Electrical form DGMS, Dhanbad for review of this standard.  (iii) to request Dr RK Vishwakarma to provide point of contact for DGMS, Dhanbad  (iv) to reaffirm this standard.	i) Co-option letters were written to DGMS, BCCL & SCCL. Nominations received from SCCL & BCCL. Response awaited from DGMS.  ii)Response awaited from DGMS.  iii) Dr RK Vishwakarma may provided point of contacts  iv) The standard has been formally Reaffirmed
26.	IS 13109 (Part 21) : 1991	Specification for electronic equipment/systems for use in coal - and metalliferous mines: Part 21 requirements for mine environmental telemonitoring systems	-	-do-	The Committee decided: i) to Co-opt DGMS, Dhanbad Industry BCCL, SCCL for their inputs.  (ii) to consult DDG, Electrical form DGMS, Dhanbad for review of this standard.	i) Co-option letters were written to DGMS, BCCL & SCCL. Nominations received from SCCL & BCCL. Response awaited from DGMS.  ii)Response awaited from DGMS.  iii) Dr RK Vishwakarma may



					(iii) to request Dr RK Vishwakarma to provide point of contact for DGMS, Dhanbad  (iv) to reaffirm this standard.	provided point of contacts  iv) The standard has been formally Reaffirmed
--	--	--	--	--	-------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------

**3.3** Based on the recommendation of the committee during the last meeting and subsequent approval of the Electronics and Information Technology Division Council (LITDC) during the last LITDC meeting held on 24 June 2024, the following standards were **withdrawn**:

SI No	IS No	Title
1.	IS 12772 : 2003 IEC 60643 AND IEC 61226	Application of computers to nuclear reactor instrumentation and control (First Revision)
2.	IS 6767 (Part 2) : 1972 IEC 217 : 1967	Specification for direct reading pointer indicator type AC/DC electronic voltmeter: Part 2 up to 30 MHz
3.	IS 11051 : 1984	Methods of measurements for television sweep generators
4.	IS 11148 : 1984 IEC 60714 : 1981	Expression of the properties of spectrum analyzers
5.	IS 11423 : 1985 IEC 60421: 1973	Specification for portable prospecting radiation meters with geiger - Muller counter tube (Linear Scale Instruments)
6.	IS 11425 : 1985 IEC 60333: 1983	Test procedures for semiconductor charged - Particle detectors
7.	IS 11645 : 1985 IEC 60340: 1979	Test procedures for amplifiers and preamplifiers for semiconductor detectors for ionizing radiation
8.	IS 11796 : 1985 IEC 60295 : 1969	Specification for dc periodmeters (IEC Title: Dc Periodmeters: Characteristics And Test Methods)
9.	IS 11798 : 1985 IEC 60596 : 1978	Definitions of test method terms for semiconductor radiation detectors and scintillation counting
10.	IS 11869 : 1987 IEC 60504 : 1975	Specification for Hand and/or Foot Contamination Monitors and Warning Assemblies
11.	IS 11886 : 1987 IEC 60659: 1979	Test methods for multichannel amplitude analyzers
12.	IS 12275 : 1987 IEC 60741 : 1982	Standard for time - To - Amplitude converts for multichannel amplitude analyzers
13.	IS 12350 : 1987 IEC 60776 : 1993	Expression of the properties of logic analyzers
14.	IS 12771 : 1989 IEC 60232	General characteristics of nuclear reactor instrumentation

**3.4 The following draft Indian Standard is under wide circulation stage. The committee may discuss & decide:**

<b>SI No</b>	<b>Doc. No.</b>	<b>Title</b>	<b>Secretariat Remarks</b>
1.	LITD/08/25354 (Identical To: IEC 61226:2020)	Nuclear power plants - Instrumentation, control and electrical power systems important to safety - Categorization of functions and classification of systems	Last date of WC: <b>05 August 2024</b> Members are invited to review and provide their inputs to the BIS Member Secretary

**THE COMMITTEE MAY DISCUSS & DECIDE**

**ITEM 4 PROGRAM OF WORK**

**4.1** The present program of work of LITD 08 is given in **Annex –3**

**THE COMMITTEE MAY CONSIDER**

**ITEM 5 INTERNATIONAL STANDARDIZATION ACTIVITIES**

**5.1** Presently, LITD 08 acts as National Mirror Committee of following committees:

- IEC TC 85 - Measuring equipment for electrical and electromagnetic quantities - Principle (P)
- IEC TC 45 - Nuclear instrumentation - Observer (O)
- IEC / SC 45A - Instrumentation and Control of Nuclear facilities - Observer (O)
- IEC / SC 45B - Radiation Protection Instrumentation - Observer (O)

India is a P-member in IEC/ TC 85 and O-member in IEC/ TC 45, IEC/SC 45A, IEC/SC 45B. Participating members have an obligation to vote and participate in international meetings and have access to all the IEC documents. ‘O’ members are observer members. They do not have any voting rights, also they cannot participate in International meetings. However, they have access to all the IEC documents.

**5.2** List of standards published by IEC/ TC 85, is given at Annex-4

**5.3** List of standards published by IEC/ TC 45, IEC/SC 45A, IEC/SC 45B, are given at Annex-5

**THE COMMITTEE MAY NOTE**

**ITEM 6 NATIONAL STANDARDIZATION ACTIVITIES**

**6.1 COMMENT ON IS 9281(Specification for electronic weighing systems) series**

**6.1.1** There was an observation made by the BIS Certification Department and they requested to have the Legal Metrology Act's provisions aligned with the marking clause and other specifications of the IS 9281 series. It should be noted that IS 9281 Part 3 is the product standard, and Manufacturers of weighing scales frequently use it to obtain a BIS license for weighing scales, thereby validating IS 9281 Part 3. Additionally, they adhere to legal metrology rules, which appear to be in conflict with the Indian Standard. The marking

provision and other requirements of IS 9281(Part 3) may be linked with the same to avoid any mistake because provisions of the Legal Metrology Act are legislative requirements.

During the last committee meeting, it was **decided** to formulate a Panel with the Legal Metrology Department for review of the IS 9281 series of standards. Consequently, letters were written to the Legal metrology department, however, no response has been received and thus, this panel was not formulated. The committee may deliberate and discuss.

## 6.2 NEW WORK ITEM PROPOSAL

6.2.1 New work item proposals (NWIP) for the following title and scope have been proposed by CSIR-NPL.

1. **Proposed Title:** Laser and Wave meter  
**Proposed Scope:** Will define the standard for laser and wave meter for photoionization and laser cooling of atoms or atomic ions



Laser and Wave  
meter.pdf

2. **Proposed Title:** Time Tagger  
**Proposed Scope:** Will define the standard for Time tagger for measuring coincidence



Time Tagger.pdf

3. **Proposed Title:** Clock Laser with ULE cavity  
**Proposed Scope:** Will define the standard for establishing cavity-based ultra-stable laser frequency for interrogating Ultra narrow atomic or molecular transitions



Clock Laser with  
ULE cavity.pdf

4. **Proposed Title:** 355 nm pulsed laser source  
**Proposed Scope:** 355 nm pulsed laser source are used generally in the field of Material processing, laser remote sensing etc. But there is no BIS standard available for the specification of the 355 nm laser source.



355 nm pulsed laser  
source.pdf

5. **Proposed Title:** Dual Frequency Comb Based THz Comb  
**Proposed Scope:** Traceability and Calibration of Terahertz frequencies



Dual Frequency  
Comb Based THz Co

6. **Proposed Title:** RF Generator  
**Proposed Scope:** Key components for stable and reproducible signals from Plasma generation in ICP-MS analysis.



RF Generator.pdf

## **THE COMMITTEE MAY DELIBERATE AND DECIDE**

### **ITEM 7 Guidelines on Research Projects**

#### **7.1 Introduction**

BIS has issued Guidelines for Research & Development Projects for Formulation and Review of Standards. The Objectives of this Scheme are to:

- A. Support and commission R&D projects to generate knowledge, empirical data and insights that would help in formulating new standards and updating & upgrading the existing Indian standards.
- B. Expand the network of domain area experts to carryout R&D projects in the areas related to standardization and conformity assessment; and
- C. Enrich the research ecosystem in the educational institutions imparting technical and professional education.

BIS will publish a list of research & development projects along with Terms of Reference (ToR) on Standardization portal or any other suitable digital platform.

- 7.2** The current guidelines for R&D projects for establishments/revision of Indian Standards are given below:



R&D  
Guidelines.pdf



Template for  
ToR.pdf

## **THE COMMITTEE MAY PLEASE NOTE**

### **ITEM 8 DATE AND PLACE FOR THE NEXT MEETING**

### **ITEM 9 ANY OTHER BUSINESS**

## Annex-1

**Scope:** To prepare Indian Standards for electronic measuring instruments, systems and accessories for measurement, generation, test and analysis of electrical quantities including nuclear and mining instrumentation.

### Committee Composition

Sl. No	Organization	Member Name	Role
1.	Standardization Testing and Quality Certification (STQC)	Shri Atul Gupta	Chairperson
2.	All India Radio, New Delhi	Shri S Hyder	Principal Member
		Shri Rakesh Tyagi	Alternate Member
3.	Ashbee Systems Private Limited, New Delhi	Shri Ashish Bhutani	Principal Member
		Shri Tamal Nath	Alternate Member
		Ms. Neelam Ghai	Alternate Member
4.	Atomic Energy Regulatory Board, Mumbai	Shri Animesh Biswas	Principal Member
		Shri Neeraj Kumar	Alternate Member
5.	Atomic Minerals Directorate for Exploration and Research, Hyderabad	Smt. A. Meenakshi Sundari	Principal Member
		Shri A.A.P.S.R. Acharyulu	Alternate Member
6.	Bhabha Atomic Research Centre, Control Instrumentation Division, Mumbai	Shri D.A Roy	Alternate Member
		Shri P. V. Bhatnagar	Principal Member
7.	Bhabha Atomic Research Centre, Mumbai	Dr. Sourav Mukhopadhyay	Principal Member
		Ms. Kum. Diana Denice	Alternate Member
		Mr. Abhimanyu Chowdhury	Alternate Member
8.	Bharat Coking Coal Limited, Dhanbad	Shri Tushar Singh	Principal Member
9.	Bharat Electronics Limited, Bengaluru	Shri Kaushik Mondal	Principal Member
		Shri Sumashri K.	Alternate Member
10.	CSIR - National Physical Laboratory, New Delhi	Ms. Priyanka Jain	Principal Member
		Shri Saood Ahmed	Alternate Member
11.	CSIR - Central Institute for Mining and Fuel Research, Dhanbad	Dr. P. K. Mishra	Principal Member
		Dr. R.K. Vishwakarma	Alternate Member
12.	Central Mine Planning and Design Institute Limited, Ranchi	Shri P. D. Mukherjee	Principal Member
		Shri V. K. Prasad	Alternate Member
13.	Development Commissioner Micro-	Shri S.V. Sharma	Principal Member
		Shri Anuj Kansal	Alternate Member

	Small and Medium Enterprises		
14.	Directorate General Doordarshan, Prasar Bharti, New Delhi	Shri Sunil	Principal Member
		Shri Manoj Gupta	Alternate Member
		Shri S.Hyder	Alternate Member
15.	Directorate General of Quality Assurance, New Delhi	Shri Sushil Chandra	Principal Member
16.	Electronics Corporation of India Limited, Hyderabad	Smt. K. Lakshmilatha	Principal Member
		Shri Saurav Bhagabati	Alternate Member
17.	Indian Highways Management Company Limited, New Delhi	Shri Sachin Pandey	Principal Member
18.	Indian Institute of Technology (ISM), Dhanbad	Prof V. Kumar	Principal Member
		Prof S. K. Paul	Alternate Member
19.	Indian Institute of Technology Kanpur, Kanpur	Prof Sachchidanand Tripathi	Principal Member
		Prof L. D. Behera	Alternate Member
20.	Indira Gandhi Centre for Atomic Research, kalpakkam	Shri S. Sridhar	Principal Member
		Ms. K. Kameswari	Alternate Member
		Shri Aditya Gour	Alternate Member
21.	Institute for Design of Electrical Measuring Instruments, Mumbai	Shri Sanjeev Vithal Rasal	Principal Member
		Shri Pradeep Gujarathi	Alternate Member
22.	Institute for Plasma Research, Gandhinagar, Ahmedabad	Ms Aruna Thakar	Principal Member
		Shri Aveg Kumar	Alternate Member
23.	Inter University Accelerator Centre, New Delhi	Shri Joby Antony	Principal Member
		Shri E T Subramaniam	Alternate Member
		Shri B K Sahu	Alternate Member
		Shri Abhijit Sarkar	Alternate Member
		Shri Rajesh Kumar	Alternate Member
24.	K L University	Dr. Aravind Kilaru	Principal Member
25.	Kistler Instruments India Private Limited, Faridabad	Shri Vijayganesh annadurai	Principal Member
		Shri Ish kumar	Alternate Member
26.	Ministry of Communication and Information Technology, New Delhi	Shri B.A. Chetty	Principal Member
		Shri A.K. Arora	Alternate Member
27.	Ministry of Consumer Affairs, Food and Public Distribution, Department of Consumer Affairs, New Delhi	Shri Raj Kumar	Principal Member
		Shri Ashutosh Agarwal	Alternate Member
		Shri Shailendra Singh	Alternate Member
28.	Nuclear Power Corporation of India Limited, Mumbai	Ms Radha Ajit Bal	Principal Member
		Ms K.J. Meenal	Alternate Member

<b>29.</b>	RENSAR Electric Private Limited, Bengaluru	Shri Ganesh Anant Dange	Principal Member
<b>30.</b>	Raja Ramanna Centre for Advanced Technology, Indore	Shri Viraj P. Bhanage	Principal Member
		Shri Yogendra M. Sheth	Alternate Member
<b>31.</b>	Standardization Testing and Quality Certification (STQC)	Shri Nakul Agarwal	Principal Member
		Ms Sadhana Verma	Alternate Member
<b>32.</b>	Tata Consultancy Services Limited, Navi Mumbai	Ms C Sailaja	Principal Member
<b>33.</b>	The Singareni Collieries Company Limited, Kothagudem	Shri Chithuri Srinivas	Principal Member
		Shri Vadloori Anvesh Kumar	Alternate Member
		Shri Enugula Vijayapal	Alternate Member
<b>34.</b>	Uranium Corporation of India, Singhbhum District	Shri Rajesh Kumar	Principal Member
<b>35.</b>	Variable Energy Cyclotron Centre, Kolkata	Dr. Sandip Pal	Principal Member
<b>36.</b>	In Personal Capacity, Pune	Shri Amar Singh Bhisare	Principal Member
<b>37.</b>	In Personal Capacity	Shri Praveenlal EV	Principal Member