

**BUREAU OF INDIAN**  
**STANDARDS** **For BIS use only**

MINUTES

**FOURTEENTH MEETING OF WIRES, CABLES, WAVEGUIDES AND  
ACCESSORIES SECTIONAL COMMITTEE, LITD 06**

<p>दिनांक/Date: 17 नवम्बर /Nov. 23 दिन/Day : शुक्रवार/Friday समय/Time : 1100 बजे hr</p>	<p>स्थान / Venue मीमांसा मानक भवन भारतीय मानक ब्यूरो 9, बहादुर शाह ज़फर मार्ग, नई दिल्ली- 110002 White Room, Manak Bhavan, Bureau of Indian Standards 9, B.S.Z. Marg Delhi -110002 <b>And through WEBEX</b></p>
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**Members Present:**

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| <p><b>1. Chairman</b> Shri Arun Agrawal</p> | <p><b>2. Member Secretary</b> Shri Bipin Jambholkar</p> |
| 3. Shri Guruprasad C N                      | Bharat Electronics Ltd. (BEL)                           |
| 4. Shri Paritosh Kumar Shah                 | Bharat Sanchar Nigam Ltd. (BSNL)                        |
| 5. Shri Kshem Kapoor                        | Cellular Operators Association of India (COAI)          |
| 6. Shri N.N. Maurya                         | Dte. General Doordarshan, Prasar Bharati (DD)           |
| 7. Shri MP Dubey                            | Electronic Industries Association of India (ELCINA)     |
| 8. Shri P N Khairnar                        | Finolex Cables Ltd                                      |
| 9. Shri Bipin Patil                         | Finolex Cables Ltd                                      |
| 10. Shri Saurabh Ranjan                     | Min.of Electronics & Information Tech. (MeitY)          |
| 11. Shri Mohammad Shahid Khan               | Sterlite Technologies Limited (STL)                     |
| 12. Prof. N.K Goyal                         | TEMA  |
| 13. Shri Paritosh Shah                      | BSNL  |

**Regret**

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| 13. Controller | Dte. General of Quality Assurance (DGQA) |
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**ITEM 0 WELCOME**

**0.1** Member Secretary, on behalf of the Committee, welcomed the Chair and all members as well Invitees to the meeting.

Member-Secretary requested all members to Login through BIS Portal ([www.bis.gov.in](http://www.bis.gov.in)) and may ask him to reset the password if not available to members. He requested all members to login themselves, if not already done so. In case of any difficulty, they may contact the Member Secretary for resolution.

He also informed that all the information and documents are now uploaded on the BIS portal and would help in better co-ordination for Standard formulation activity.

He also informed about the instructions received by BIS from the Hon'ble Minister for Consumer Affairs that as far as possible, the Committee should meet more frequently ensuring Indian interest in every field and also non-participating members may be withdrawn from the Committee.

In view of the above, in the last meeting of Electronics and IT Division Council (LITDC), a few organizations, which had not attended the last 3 consecutive meetings, were withdrawn from the LITD 06 Composition.

He also informed that even though the Committee has been regularly reviewing all Standards, the decision on approx. 30-35 Standards formulated in 1980s and 1990s, based on IEC/ JSS Standards, needs to be reviewed.

**0.2** Shri Arun Agrawal, Chairman 06 also gave a warm welcome to the members and invitees to the meeting. He requested members to attend the meeting physically in future for better interaction and coordination in the Committee.

He also requested members to give constructive suggestion so that better Quality Standards could be formulated.

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

**1.1** The minutes of the last meeting of Sectional Committee, LITD 06, circulated vide BISDG letter No. LITD 06/A-2.13 dated 21 June 2023, were confirmed by the Committee.

## **ITEM 2 COMPOSITION OF LITD 06**

**2.1** The Committee reviewed the composition of the Committee as given in **Annex 1** (Page 6-7) of the Agenda. All members were of the view that the Committee needs to include more organizations with special emphasizes on testing Laboratories for communication cables.

**2.1.1** Corrections/Up-dation in the Membership:

**National Test House**

Shri Rajanikanth Poluri                      Principal Member

**Telecommunication Engineering Centre (TEC), Dept of Telecommunications**

Shri Avinash Agarwal                      Principal Member

Ms. Neha Upadhyay                      Alternate Member

**2.1.2** After the meeting, nominations from **RDSO (Ministry of Railways)** were received.

Shri U.K.Verma                      Principal Member

Smt.Sangeeta Pandey                      Alternate Member

**2.1.3** During the meeting, the following nominations were conveyed by **BSNL**:

Shri Kapil Rastogi, GMQA (North), New Delhi	<b>Principal Member</b>
Shri Paritosh Kumar Shah, GM (MM), New Delhi	<b>Alternate Member</b>

**2.2** It was informed by the Member-Secretary that as per the Committee decision, request letter for co-option in LITD 06 was sent to the following Organizations /Associations. But no response was received.

1. Electronics Component Standardization Organisation (LCSO)/  
Electronics & Radar Development Establishment (LRDE), DRDO
2. DTH Association of India

It was decided to send a request letter once again to the above-mentioned organizations.

**2.2.1** All members were requested to provide contact details of the above mentioned Organizations/Associations.

**2.3** As per the BIS Policy, the following Organizations, which have not attended the last two consecutive meetings were recommended for withdrawal from LITDC.

1. Central Electronics Engg. Research Institute (CEERI)
2. Electronics Corporation of India Ltd. (ECIL),Hyderabad
3. Indian Cellular & Electronics Association (ICEA) and
4. SAMEER, Mumbai

**2.4** It was decided to invite the following organizations to the next few meetings and to add them to the additional mailing list which will give them access to all the documents that will be circulated. Based on their contribution, they may be co-opted in the future.

- a) Orient Cables
- b) Tata Play
- c) Polycab

**2.5** Members were also requested to suggest reputed Manufactures/ Laboratories/ Associations/ reputed manufacturers of Coaxial cables/ Waveguides for co-option in the Committee. Based on members’ recommendation, they would be invited to the next meeting of LITD 06 and for the intervening period, they will be included in the additional mailing list of the Committee so that they can access all documents circulated by BIS.

**ITEM 3 Preliminary Draft Indian Standards for Wide Circulation**

**3.1** The following Preliminary Draft Standards were circulated to all the Members of LITD 06 and LITD 11 for comments:

<b>Sr. No.</b>	<b>Document No. Title</b>	<b>Circular No and Date</b>	<b>Comments</b>
<b>1</b>	<b>Doc: LITD 06 (23349) IS / IEC 62807-1:2017 Hybrid telecommunication cables –Part 1 Generic specification ICS 33.120.20</b>	<b>LITD 06/ T – 05 Sept 2023</b>	Approved for Wide Circulation
<b>2</b>	<b>Doc: LITD 06 (23351) IS / IEC 62807-3-10:2023 Hybrid communication cables – Part 3 Outdoor hybrid cables – Section 10 Family specification for FTTA hybrid communication cables ICS 33.120.20</b>	<b>LITD 06/ T – 05 Sept 2023</b>	-do-
<b>3</b>	<b>Doc: LITD 06 (23351) IS / IEC 62807-3:2023 Hybrid communication cables – Part 3 Outdoor hybrid cables – Sectional specification ICS 33.120.20</b>	<b>LITD 06/ T – 05 Sept 2023</b>	-do-

**3.2** The Committee approved the above mentioned documents for Wide circulation.

**ITEM 4 DRAFT INDIAN STANDARDS FOR FINALIZATION**

**4.1** The Committee noted that the following Draft Standards were circulated for comments under wide Circulation :

<b>Sl No.</b>	<b>Document No. Title</b>	<b>Circular No and Date</b>	<b>Comments</b>
<b>1</b>	<b>LITD 06 (23343) IS /IEC 61196-6: 2021 Coaxial communication cables – Part 6 Sectional specification for CATV drop cables (First Revision) ICS 33.120.10</b>	<b>LITD 06/ T – 11 Sept 2023</b>	The Committee approved the document for printing
<b>2</b>	<b>LITD 06 (23344) IS /IEC 61196-6-1: 2021 Coaxial communication cables Part 6 CATV drop cables Section 1 Blank detail specification (First Revision) ICS 33.120.10</b>	<b>LITD 06/ T – 11 Sept 2023</b>	-do-
<b>3</b>	<b>LITD 06 (23345) IS / IEC 61196-1-104: 2015 Coaxial communication cables Part 1 Test methods Sec 104 Electrical – Test for the stability of the capacitance of cable versus temperature (First Revision) ICS 33.120.10</b>	<b>LITD 06/ T – 11 Sept 2023</b>	-do-

4	<b>LITD 06 (23346) IS / IEC 61196-1-200: 2022</b> <b>Coaxial communication cables – Part 1 Test methods – Sec 200 Environmental-General requirements (First Revision)</b> ICS 33.120.10	<b>LITD 06/ T – 11 Sept 2023</b>	The Committee approved the document for printing
5	<b>LITD 06 (23347) IS / IEC 62037-1: 2021</b> <b>Passive RF and microwave devices, intermodulation level measurement – Part 1 General requirements and measuring methods (First Revision)</b> ICS 33.040.20	<b>LITD 06/ T – 11 Sept 2023</b>	-do-
6	<b>LITD 06 (23348) IS / IEC 62153-4-5: 2021</b> <b>Metallic communication cable test methods – Part 4 Electromagnetic compatibility (EMC) – Sec 5 Screening or coupling attenuation – Absorbing clamp method (First Revision)</b> ICS 33.100.10; 33.120.10	<b>LITD 06/ T – 11 Sept 2023</b>	The Committee approved the document for printing

**ITEM 5 PRESENT POSITION OF WORK (POW) OF LITD 06**

5.1 The Committee noted the present position of work of LITD 06 as given in **Annex 2** (Pg 15-20) of the Agenda.

5.2 The Member Secretary informed the Committee that as per the BIS procedure, Indian Standards which have been in existence for more than 3 years, need to be reviewed for reaffirmation/revision/withdrawal/archival. The following Standards were reaffirmed for a period of three years from the date of reaffirmation till they are withdrawn/archived.

Sr. No	Indian Standard Number	Title	Date of Reaffirmation
1.	IS 4493 (Part 1) : 2021 IEC 60153-1: 2016	Hollow Metallic Waveguides Part 1 General requirements and measuring methods Second Revision	Mar 24
2.	IS 4493 (Part 4) : 1982 IEC 60153-3:1964 & JSS 53003 D	Specification for hollow metallic waveguides Part 4 flat rigid rectangular waveguides	Feb 21
3.	IS 14493 (Part 1) : 2020 IEC 61156-1: 2009	Multicore And Symmetrical Pair Quad Cables For Digital Communications Part 1 Generic Specification (First Revision)	Jul 23
4.	IS 14686 (Part 1) : 2021 IEC 60966-1: 2019	Radio frequency and coaxial cable assemblies Part 1 Generic specification General requirements and test methods Second Revision	Jul 23
5.	IS 14686 (Part 2/Sec 1) : 2020 IEC 60966-2-1: 2008	Radio Frequency and Coaxial Cable Assemblies Part 2 Flexible Coaxial Cable Assemblies Section 1 Sectional specification (First Revision)	Jul 23
6.	IS 14686 (Part 2/Sec 2): 2020 IEC 60966-2-2: 2008	Radio Frequency and Coaxial Cable Assemblies Part 2 Flexible Coaxial Cable Assemblies Section 2 Blank detail specification	Nov 23
7.	IS 14686 (Part 2/Sec 3): 2020 IEC 60966-2-3: 2009	Radio Frequency and Coaxial Cable Assemblies Part 2 Flexible Coaxial Cable Assemblies Section 3 Detail specification Frequency range 0 MHz to 1 000 MHz IEC 61169-8 connectors	Nov 23
8.	IS 14686 (Part 2/Sec 4): 2020 IEC 60966-2-4: 2016	Radio Frequency and Coaxial Cable Assemblies Part 2 Flexible Coaxial Cable Assemblies Section 4 Detail specification Radio and TV receivers Frequency range 0 MHz to 3 000 MHz IEC 61169-2 connectors	Nov 23
9.	IS/IEC 60096-0-1 : 2017	Radio Frequency Cables Part 0 Guidelines to the Design of Detail Specifications Section 1 Coaxial cables	Jul 23

10.	IS/IEC 60154- 1 : 2016	Flanges for Waveguides Part 1 General requirements	Jul 23
11.	IS/IEC 60189-1: 2018	Low-Frequency Cables and Wires with PVC Insulation and PVC Sheath Part 1 General Test and Measuring Methods	Jul 23
12.	IS/IEC 60189-2 : 2018	Low-Frequency Cables and Wires with PVC Insulation and PVC Sheath Part 2 Cables in Pairs Triples Quads and Quintuples for Inside Installations	Jul 23
13.	IS/IEC 60189-3 : 2020	Low-Frequency Cables and Wires with PVC Insulation and PVC Sheath Part 3 Equipment Wires with Solid or Stranded Conductor Wires PVC Insulated in Singles Pairs and Triples	Jul 23
14.	IS/IEC/TR 60344 : 2007	Calculation of d c Resistance of Plain and Coated Copper Conductors of Low-frequency Cables and Wires Application Guide	Jul 23
15.	IS/IEC 61196-0-1 : 2017	Radio Frequency Cables Part 0 Guidelines to the Design of Detail Specifications Section 1 Coaxial cables	Jul 23
16.	IS/IEC 61196-1 : 2005	Coaxial communication cables Part 1 generic specification - General definitions and requirements	Nov 23
17.	IS/IEC 61196-1-100 : 2005	Coaxial communication cables Part 1 - 100 electrical test methods - General requirements	Jul 23
18.	IS/IEC 61196-1-101 : 2005	Coaxial communication cables Part 1 - 101 electrical test methods - Test for conductor D C resistance of cable	Jun 23
19.	IS/IEC 61196-1-102 : 2005	Coaxial communication cables Part 1 - 102 electrical test methods - Test for insulation resistance of cable dielectric	Nov 23
20.	IS/IEC 61196-1-103 : 2005	Coaxial communication cables Part 1 - 103 electrical test methods - Test for capacitance of cable	Dec 23
21.	IS/IEC 61196-1-105 : 2005	Coaxial communication cables Part 1 - 105 electrical test methods - Test for withstand voltage of cable dielectric	Nov 23
22.	IS/IEC 61196-1-107 : 2005	Coaxial communication cables Part 1 - 107 electrical test methods - Test for cable microphony charge level Mechanically Induced Noise	Dec 23
23.	IS/IEC 61196-1-108 : 2005	Coaxial communication cables Part 1 - 108 electrical test methods - Test for characteristic impedance phase and group delay electrical length and propagation velocity	Feb 24
24.	IS/IEC 61196-1-111 : 2005	Coaxial communication cables Part 1 - 111 electrical test methods - Test for stability of phase constant	Mar 24
25.	IS/IEC 61196-1-112 : 2006	Coaxial communication cables Part 1 - 112 electrical test methods - Test for return loss Uniformity Of Impedance	Mar 24
26.	IS/IEC 61196-1-115 : 2006	Coaxial communication cables Part 1 - 115 electrical test methods - Test for regularity of impedance Pulse step Function Return Loss	Feb 24
27.	IS/IEC 61196-1-122 : 2006	Coaxial communication cables Part 1 - 122 electrical test methods - Test for cross - Talk between coaxial cables	Aug 23
28.	IS/IEC 61196-1-206 : 2005	Coaxial communication cables Part 1-206 Environmental test methods Climatic sequence	Aug 23
29.	IS/IEC 61196-1-301 : 2005	Coaxial communication cables Part 1 - 301 mechanical test methods - Test for ovality	Feb 24
30.	IS/IEC 61196-1-308 : 2012	Coaxial Communication Cables Part 1 Mechanical Test Methods Section 308 Test for tensile strength and elongation for copper-clad metals First Revision	Jul 23
31.	IS/IEC 61196-3 : 1998	Radio Frequency Cables Part 3 Sectional Specification for Coaxial Cables for Local Area Networks	Nov 23
32.	IS/IEC 61196-3-1 : 1995	Radio-frequency Cables Part 3 Coaxial Cables for Digital Communication in Horizontal Floor Wiring Section 1 Detail specification for cables of 500 m reach and up to 10 Mb s	Nov 23

33.	IS/IEC 61196-3-2 : 1997	Radio-frequency Cables Part 3 Coaxial Cables for Digital Communication in Horizontal Floor Wiring Section 2 Detail specification for coaxial cables with solid dielectric for local area networks of 185 m reach and up to 10 Mb s	Nov 23
34.	IS/IEC 61196-3-3 : 1997	Radio-frequency Cables Part 3 Coaxial Cables for Digital Communication in Horizontal Floor Wiring Section 3 Detail specification for coaxial cables with foamed dielectric for local area networks of 185 m reach and up to 10 Mb s	Nov 23
35.	IS/IEC 61196-6-1 : 2009	Coaxial Communication Cables Part 6 CATV Drop Cables Section 1 Blank detail specification	Nov 23
36.	IS/IEC 61196-6-2 : 2020	Coaxial Communication Cables Part 6 CATV Drop Cables Section 2 Detail specification for 75-4 type cables	Nov 23
37.	IS/IEC 61196-6-3 : 2020	Coaxial Communication Cables Part 6 CATV Drop Cables Section 3 Detail specification for 75-5 type cables	Nov 23
38.	IS/IEC 61196-6-4 : 2020	Coaxial Communication Cables Part 6 CATV Drop Cables Section 4 Detail specification for 75-7 type cables	Nov 23
38.	IS/IEC 61196-8-1 : 2012	Coaxial Communication Cables Part 8 Semi-flexible Cables with Polytetrafluoroethylene PTFE Dielectric Section 1 Blank detail specification	Oct 23
39.	IS/IEC 61196-8-2: 2012	Coaxial Communication Cables Part 8 Semi-flexible Cables with Solid Polytetrafluoroethylene PTFE Insulation Section 2 Detail specification for 50-047 type	Oct 23
37.	IS/IEC 61196-8-3 : 2012	Coaxial Communication Cables Part 8 Semi-flexible Cables with Solid Polytetrafluoroethylene PTFE Insulation Section 3 Detail specification for 50-086 type	Oct 23
38.	IS/IEC 61196-8-4 : 2012	Coaxial Communication Cables Part 8 Semi-flexible Cables with Solid Polytetrafluoroethylene PTFE Insulation Section 4 Detail specification for 50-141 type	Oct 23

**5.3** The Member Secretary informed the Committee about the following Indian Standards published before year 2000 (late 1970's/1980's) and formulated Indigenously. BIS has tried to identify the users/usage of the Standards and it was found out that most of them have become obsolete/have limited users/usage.

Member Secretary again requested members to Identify Standards which are relevant to Indian Conditions. It was decided that if no response is received within 15 days of circulation of the minutes, all Pre-2000 Standards for will be considered approved for Archive. (Archive: Standard may be obsolete, but may be useful for information purpose or used for maintaining old equipment or for Academic purpose)

Sr. No.	IS No.	Title	Latest Position of International Std	Remarks
1.	IS 4493 (Part 4) : 1982 IEC 60153-3:1964 & JSS 53003 D	Specification for hollow metallic waveguides Part 4 flat rigid rectangular waveguides	Indigenous Standard. Assistance derived from IEC and JSS.	Standard may be archived

2.	IS 5026 : 1987	General requirements and tests for radio frequency cables (1st Rev.)	Indigenous Standard	Standard may be archived
3.	IS 9566 : 1980 IEC 60197:1965	Specification for high tension connecting wires for use in television receivers	Indigenous Standard. Assistance derived from IEC	Standard may be archived
4.	IS 10579 : 1983	Specification for polyethylene PE insulation and sheath of telecommunication cables	Indigenous Standard	Standard may be archived
5.	IS 10738 (Part 3/Sec 1) : 1991 IEC 60154-3 : 1982	Specification for flanges for waveguides Part 3 flanges - For flat rectangular Sec 1 general	Indigenous Standard based on	Standard may be archived
6.	IS 10738 (Part 3/Sec 2) : 1991 IEC 60154-3 : 1982	Flanges for waveguides specification Part 3 flanges for flat rectangular waveguides Sec 2 flange type G	IEC 60154-3: 1982 No Change in IEC	Standard may be archived
7.	IS 10738(Part 5/Sec 1): 1991 IEC 60154-6 : 1983	Flanges for waveguides Part 5 flanges for medium flat rectangular waveguides Sec 1 general	Indigenous Standard	Standard may be archived
8.	IS 10738 (Part 5/Sec 2) : 1992 IEC 60154-6: 1983	Flanges for waveguides specification Part 5 flanges for medium flat rectangular waveguides Sec 2 flange type L	based on IEC 60154-6: 1983	Standard may be archived
9.	IS 10738 (Part 5/Sec 3) : 1992 IEC 60154-6: 1983	Flanges for waveguides - Specification Part 5 flanges for medium flat rectangular waveguides Sec 3 flange type N	No Change in IEC	Standard may be archived
10.	IS 10738 (Part 6/Sec 1) : 1991 IEC 60154-7: 1974	Flanges for waveguides - Specification Part 6 flanges for square waveguides Sec 1 general	Indigenous Standard based on	Standard may be archived
11.	IS 10738 (Part 6/Sec 2) : 1991 IEC 60154-7: 1974	Specification for flanges for waveguides Part 6 flanges for square waveguides Sec 2 flange type K	IEC 60154-7: 1974 No Change in IEC	Standard may be archived
12.	IS 11075 (Part 1) : 1984 JSS 52401	Specification for radio frequency connectors of BNC TNC and UHF series Part 1 test schedule and requirements	Indigenous Standard based	
13.	IS 11075 (Part 2/Sec 1) : 1984 JSS 52401	Specification for radio frequency connectors of BNC TNC and UHF series - Part 2 BNC series - Sec 1 straight plug male cabled type xxxx IS - 01 - 01 to 04 and 50 to 53	on JSS Standards.	
14.	IS 11075 (Part 2/Sec 2) : 1985 JSS 52401	Specification for radio frequency connectors of BNC TNC and UHF series Part 2 BNC series Sec 2 cabled socket type 11075 IS - 02 - 01 to 02 and 50 to 51	BIS has adopted IEC 60169 series as IS 5054 series for radio frequency Connectors.	Standard may be archived to avoid duplicity and confusion as IS 5054 series are taking care of radio frequency connectors
15.	IS 11075 (Part 2/Sec 3) : 1985 JSS 52401	Specification for radio frequency connectors of BNC TNC and UHF series Part 2 BNC series Sec 3 plug right angle cabled type 11075 IS - 03 - 01 to 02 and 50 to 51		
16.	IS 11967 (Part 1/Sec 1) : 1987 MIL-C-17/119 G-RG 174 JSS 51100	Specification for radio frequency coaxial cables Part 1 solid polyethylene Sec 1 flexible type R 50 - 2 - A01	Indigenous Standard based on MIL Standard	Standard may be archived



17.	IS 11967 (Part 1/Sec 2) : 1987 MIL-C-17/28C - RGO 58 JSS 51100	Specification for radio frequency coaxial cables Part 1 solid polyethylene Sec 2 flexible type R 50 - 3 - A02	Indigenous Standard based on MIL Standard	Standard may be archived
18.	IS 11967 (Part 1/Sec 3) : 1987 MIL-C-17/84B-RG 223 JSS 51100	Specification for radio frequency coaxial cables Part 1 solid polyethylene Sec 3 flexible type R 50 - 3 - A03	Indigenous Standard based on MIL Standard	Standard may be archived
19.	IS 11967 (Part 1/Sec 4) : 1987 MIL-C-17/74 C-RG 213 JSS 51100	Specification for radio frequency coaxial cables Part 1 solid polyethylene Sec 4 flexible type R 50 - 7 - A04	Indigenous Standard based on MIL Standard	Standard may be archived
20.	IS 11967 (Part 1/Sec 5) : 1987 MIL-C-17/74 C-RG 215 JSS 51100	Specification for radio frequency coaxial cables Part 1 solid polyethylene Sec 5 flexible type R 50 - 7 - A05	Indigenous Standard based on MIL Standard	Standard may be archived
21.	IS 11967 (Part 2/Sec 1) : 1989	Specification for radio frequency coaxial cables Part 2 polyethylene Semi - Solid cables Sec 1 type R 75 - 5 - B 100	Indigenous Standard based on MIL Standard	Standard may be archived
22.	IS 11967 (Part 2/Sec 2) : 1989	Specification for radio frequency coaxial cables Part 2 polyethylene - Semi - Solid cables Sec 2 type R 120 - 7 5 - 8 101	Indigenous Standard based on MIL Standard	Standard may be archived
23.	IS 11967 (Part 2/Sec 3) : 1989	Specification for radio frequency coaxial cables Part 2 polyethylene Semi - Solid cables Sec 3 type R 150 - 5 - B 102	Indigenous Standard based on MIL Standard	Standard may be archived
24.	IS 11967 (Part 3/Sec 1) : 1988 MIL-C-17/113C	Specification for radio frequency coaxial cables Part 3 solid extruded tape wrapped PTFE Sec 1 flexible type R 50 - 2 F01	Indigenous Standard based on MIL Standard	Standard may be archived
25.	IS 11967 (Part 3/Sec 2) : 1988 MIL-C-17/60C-RG 142	Specification for radio frequency coaxial cables Part 3 solid extruded tape wrapped PTFE Sec 2 flexible type R50 - 3 F02	Indigenous Standard based on MIL Standard	Standard may be archived
26.	IS 11967 (Part 3/Sec 3) : 1988 M17/111-RG 303	Specification for radio frequency coaxial cables Part 3 solid extruded tape wrapped PTFE Sec 3 flexible type R 50 - 3 - F - 03	Indigenous Standard based on MIL Standard	Standard may be archived
27.	IS 11967 (Part 3/Sec 4) : 1989 M17/111-RG 302	Radio frequency coaxial cables - Specification Part 3 solid extruded Tape wrapped PTFE Sec 4 flexible type R 75 - 2 - F 04	Indigenous Standard based on MIL Standard	Standard may be archived
28.	IS 11967 (Part 3/Sec 5) : 1989 MIL-C- 17/ 110C-RG 302	Radio frequency coaxial cables - Specification Part 3 solid extruded tape wrapped ptfе Sec 5 flexible type R 75 - 4 - F 05	Indigenous Standard based on MIL Standard	Standard may be archived
29.	IS 11967 (Part 3/Sec 6) : 1989 MIL-C-17/950-RG 180	Radio frequency coaxial cables - Specification Part 3 solid extruded tape wrapped ptfе Sec 6 flexible type R 95 - 3 - F 06	Indigenous Standard based on MIL Standard	Standard may be archived

30	IS 12380 (Part 1) : 1988 JSS 52402	Specification for radio frequency connectors of n series Part 1 test schedule and requirements	Indigenous Standard based on JSS Standards. BIS has adopted IEC 60169 series as IS 5054 series for radio frequency Connectors.	Standard may be withdrawn /archived to avoid duplicity and confusion as IS 5054 series are taking care of radio frequency connectors
31	IS 12419 (Part 1) : 1988 JSS 52405	Specification for radio frequency connectors of SMA SMB and SMC series Part 1 test schedule and requirements	Indigenous Standard based on JSS	Standard may be archived
32	IS 13667 : 1993	Conductors for electronics and telecommunication applications tinsel conductors - Specification	Indigenous Standard	Standard may be archived

**5.3.1** As can be observed from the list, most of the above-mentioned Standards were formulated with help from JSS/MIL Standards. Hence, **the** Committee requested Bharat Electronics Limited to further circulate all the above Indian Standards to the relevant Defence Organizations like DGQA/LCSO/DRDO, etc.

**5.4** **The** Committee also decided that the following Pre-2000 Standards should be retained:

Sr. No.	IS No.	Title	Last Reaff. /Pub. date	Latest Position of International Std	Remarks
1	IS 5054 (Part 1/Sec 1) : 1995 IEC 60169-1-1: 1987	Radio frequency connectors Part 1 general requirements and measuring methods Sec 1 general	June, 2022	No Change in IEC	Standard may be retained, as it is still in use.
2	IS 5054 (Part 1/Sec 2) : 1995 IEC 60169-1-1: 1987	Radio frequency connectors Pt 1 General requirements and measuring methods Sec 2 Electrical tests and measuring procedures Reflection factor	June, 2022	No Change in IEC	Standard may be retained, as it is still in use.
3	IS 5054 (Part 1/Sec 3) : 1995 IEC 60169-1-3: 1988	Radio frequency connectors Part 1 General requirements and measuring methods Sec 3 Electrical tests and measuring procedures Screening effectiveness	June, 2022	No Change in IEC	Standard may be retained, as it is still in use.
4	IS 9817 : 1992 IEC 60261 : 1989	Sealing test for pressurized wave guide tubing and assemblies (1st)	Feb, 2023	No Change in based IEC Standards	Standard may be retained, as it is still in use.
5	IS 9938 : 1981 IEC 60304: 1978	Recommended colours for PVC insulation for LF wires and cables	Feb, 2023	Was based on IEC 60304: 1978	Standard is referred in large no. of Indian Standards May be Retained
6	IS 13246 : 1992 IEC 60374:1971	Guide for choosing modular dimensions for waveguide components	Feb, 2023	Dual No. Indian Standard. No Change in base IEC Standard	Standard may be retained
7	IS 13248 : 1992 IEC 60636:1979	Flexible waveguide assembly performance	Feb, 2023	Dual No. Indian Standard. No Change in base IEC Standard	Standard may be retained
8	IS 13667 : 1993	Conductors for electronics and telecommunication applications tinsel conductors - Specification	Feb, 2023	Indigenous Standard	Standard may be archived

## 5.5 Draft Indian Standards Approved for Wide Circulation

**5.5.1** Committee has gone through list of Indian Standards due for review in Item 5.2.1 and decided that wherever the base IEC Standard has been revised, BIS should also revise the Standard to align it with latest IEC Standard. Hence the Committee asked BIS to issue the following documents, based on the latest International standards or Final Draft Documents of IEC, directly in Wide Circulation.

Sl. No	IEC No. / Title/ IEC Comm. No./ Revision	Time
1.	IEC 60050-726:1982 TC/SC TC 1 International Electrotechnical Vocabulary (IEV) - Part 726: Transmission lines and waveguides Amd 1: 2016, Amd 2: 2017, Amd 3: 2018, Amd 4: 2019, Amd 5: 2020 Amd 6: 2021, Amd 7: 2021 (first revision of IS 1885 (Part 56)) Note: Sl. No.1	One Month WC
2	IEC 61156-1:2023 TC/SC TC 46/SC 46C Multicore and symmetrical pair/quad cables for digital communications - Part 1: Generic specification (Second revision of IS/IEC 14493 (Part 1)) Note: Sl. No.42	Two Month WC
3.	IEC 61196-1-100:2022 TC/SC TC 46/SC 46A Coaxial communication cables - Part 1-100: Electrical test methods - General requirements (first revision of IS/IEC 61196-1-100) Note : Sl No 56	Two Month WC
4.	IEC 61196-1-103:2015 TC/SC TC 46/SC 46A Coaxial communication cables - Part 1-103: Electrical test methods - Test for capacitance of cable (first revision of IS/IEC 61196-1-103) Note: Sl No. 59	Two Month WC
5.	IEC 61196-1-108:2011 TC/SC TC 46/SC 46A Coaxial communication cables - Part 1-108: Electrical test methods - Test for characteristic impedance + phase and group delay + electrical length and propagation velocity (First Revision) Note: Sl. No 62	Two Month WC
6.	IEC 61196-1-111:2014 TC/SC TC 46/SC 46A Coaxial communication cables - Part 1-111: Electrical test methods - Stability of phase test methods (first revision) Note: Sl. No 63	Two Month WC
7.	IEC 61196-1-206:2017 TC/SC TC 46/SC 46A Coaxial communication cables - Part 1-206: Environmental test methods - Climatic sequence (first revision) Note: Sl. No 67	Two Month WC
8.	IEC 61196-8-1:2023 TC/SC TC 46/SC 46A Coaxial communication cables - Part 8-1: Blank detail specification for semi-flexible cables with fluoropolymer dielectric (first revision) Note: Sl. No 77	Two Month WC

**ITEM 6 Research and Development Project**

**The Committee noted the BIS Guidelines for Research & Development Projects for Formulation and Review of Standards.**

**The Committee approved the following proposal for R&D Project**

Requirements for the Cellular Polyethylene Insulated PVC Sheathed Co-Axial Cables for Cable TV Networks

**ITEM 6 INTERNATIONAL STANDARDIZATION ACTIVITIES**

**6.1** The Committee noted that LITD 06 acts as the National Mirror Committee of IEC/ TC 46, IEC/ TC 46A, IEC/ TC 46C, and IEC/TC 46F. Members were informed that India is observer members in the four IEC committees concerned with LITD 06.

**6.1.1** The Committee noted that the Membership of IEC TC 46 C was downgraded from P-Member to O-Member due to non-participation. It was requested to all expert members in IEC to regularly participate in the Committee meetings.

**6.2** The Committee decided to become P-member in IEC SC 46 A, as it has adopted most the SC 46 A Standards.

**6.3** The list of working groups under IEC/TC 46 and its sub-committee are given below:

Sr. No.	Title	Subcommittee/Working Groups	Expert
1	TC 46 Cables, wires, waveguides, RF connectors, RF and microwave passive components and accessories (O-Member)	WG 5 Test methods and limits for the electromagnetic compatibility (EMC) of metallic cables and other passive components, by the measurement of their electromagnetic coupling with the environment	
		WG 6 Passive Intermodulation Measurement (PIM)	
		WG 9 Metallic Cable Assemblies for ICT Maintenance Teams	
		MT IEV-726 IEV 726 Joint Working Groups	
		JWG 1 Raw materials and environmental issues linked to SC 86A	Shri Sudipta Bhaumik

Sr. No.	Title	Subcommittee/Working Groups	Expert
2	SC 46A Coaxial cables (P-Member)	WG 3 Coaxial cables for ICT (Information and Communications Technology) and multimedia distribution networks and systems	Shri Bipin Jambholkar

Sr. No.	Title	Subcommittee/Working Groups	Expert
3	SC 46C Wires and symmetric cables O-Member	WG 7 Premises cables for digital communication	<del>Mr. Mohammad Shahid Khan</del> <del>Ms Darshana Bhatt</del>
		WG 10 Twin-axial cables Maintenance Teams	
		MT 62222 Fire performance of communication cables installed in buildings. - Update new methods of fire retardancy.	
		JWG 8 62807 linked to SC 86A	Shri Sudipta Bhaumik

Sr. No.	Title	Subcommittee/Working Groups	Expert
4	SC 46F RF and microwave passive components (O-Member)	WG 1 RF and Microwave connectors including test methods	

**Item 7 Process Reforms in Standardization Activity of BIS**

7.1 The Committee noted the information given in the Agenda.

**ITEM 8 WTO-TBT ENQUIRY POINT**

8.1 The Committee noted the information given in the Agenda.

8.2 BIS-IR&TISD Department serves as the WTO TBT Enquiry Point. The email IDs of the **Enquiry Point** are as follows:

a) ird@bis.gov.in ; b) tisd@bis.gov.in

8.3 It was also informed that for Telecom Sector, Telecommunication Engineering Center (TEC) of Department of Telecom, functions as the designated National Enquiry Point, as nominated by the Ministry of Commerce. The contact details of the Telecom Sector Enquiry Point are as follows:

**Contact Person:** DDG (IMP&TEP)

**Address:** Room No. 374, Khurshid Lal Bhawan, Janpath, New Delhi-110001, India.

**Contact Number:** +(91)-11-23324703

**Website:** <https://www.tec.gov.in>

**Email ID for TBT related queries:** [tbt enquiry@tel.tec.gov.in](mailto:tbt enquiry@tel.tec.gov.in)

**ITEM 9 ELECTRONICS AND INFORMATION TECHNOLOGY GOODS (REQUIREMENTS FOR COMPULSORY REGISTRATION) ORDER, 2012**

9.1 The Committee noted the information given in the Agenda.

**ITEM 10 INFORMATION ON E-SALE OF STANDARDS BY BIS**

**10.1** The Committee noted the information given in the Agenda. It was also informed that the citizens may purchase Indian Standards from <http://www.standardsbis.in/Gemini/home/Home.action>. On the website, information regarding identical/equivalent Standards, along with scope, is also available.

**ITEM 11. NATIONAL INSTITUTE OF TRAINING FOR STANDARDIZATION (NITS)**

**11.1** The Committee noted the information given in the Agenda.

**ITEM 12 DATE AND PLACE FOR THE NEXT MEETING**

**12.1** It was decided that the next meeting will be held after consulting the Chair. The Meeting ended with a vote of thanks to Chairman and all members.