**BUREAU OF INDIAN STANDARDS**

**ELECTRONICS & IT DEPARTMENT**

**3rdMeeting of Computer Hardware, Peripherals, Office Equipment and User Interfaces Sectional Committee (LITD 36)**

**AGENDA**

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| **Date** | **Meeting Link** |
| **Date:**17 October 2022 **Day:** Monday**Time:** 14 30 h **Mode:** Hybrid | https://bisindia.webex.com/bisindia/j.php?MTID=m666d8d14dcf758a36c308243135404d1 |

**Chairperson:** Shri A K Rai

**Member Secretary:** Shri Koushik Dutta

## WELCOME AND OPENING REMARKS

## CONFIRMATION OF MINUTES OF THE PREVIOUS MEETING

1. The minutes of the 2nd meeting of LITD 36 sectional committee, held on 12 July 2022 were circulated to the committee members on 11 August 2022. No comments have been received on the minutes. The committee may formally approve the minutes of the meeting.

## SCOPE & COMPOSITION OF THE COMMITTEE

1. **Scope:** Standardization in the field of
* Computer hardware and peripherals, removable digital storage media (utilizing optical, holographic, and magnetic recording technologies) and flash memory technologies for digital information interchange.
* Basic characteristics, test methods and other related aspects of office equipment such as Printers/Scanners, Copiers, Projectors, and Systems composed of their combinations.
* User-system interfaces in ICT environments and support for these interfaces to serve all users, including people having accessibility or other specific needs.
1. **Liaison:**
* ISO/IEC/JTC1 TC- SC-23 (P): Digitally Recorded Media for Information Interchange and Storage
* ISO/IEC/JTC1 TC- SC-28 (P): Office Equipment
* ISO/IEC/JTC1 TC- SC-35 (P): User Interfaces
1. **Composition:**
* The composition of the committee is given in Annex 1. The committee may please note.

2.4 Pursuant to the discussions held in the previous meeting of LITD 36, the following nominations have been received from MAIT for incorporation in the committee and the panels under it-

i. Shri G S Sondhi

Sr. Director- Product Management- Commercial Business Group

Acer India (Pvt.) Ltd.

1. Shri Akarsh Dayal

Manager-Corporate Affairs

Netweb Technologies India Pvt. Ltd.

It is proposed that the nominees may be incorporated in the LITD 36 sectional committee as well as Panel 1 and 2 respectively. The committee may please consider.

## PROGRAM OF WORK OF LITD 36

1. The Program of Work (PoW) of LITD 36 sectional committee is given in Annex 2. The committee may please note.

## STANDARDIZATION OF NOTE SORTING MACHINES (NSM)

1. A letter has been received from RBI recently highlighting the need to standardize Note Sorting Machines (NSM) being used by the banks. In their letter addressed to BIS, RBI has informed that the banks are using these NSMs to sort banknotes for segregating them into reusable and soiled notes and detect counterfeit notes. RBI has also issued the Note Authentication and Fitness Sorting Guidelines for NSMs as minimum standards for cash handling by banks. The copy of their guidelines is placed in Annexure 3.

RBI has expressed the need for certification/conformity assessment for these machines to ensure quality assurance and compliance to statutory provisions and have requested BIS to formulate standard(s) on NSMs. LITD 36 sectional committee has been assigned the task to formulate standard(s) on NSM in consultation with the stakeholders on top priority.

In this connection, RBI has been requested to give a presentation detailing their requirements before the committee members. The committee may please analyse the requirements of RBI and initiate immediate action for formulating standards on NSM.

## REVIEW OF PUBLISHED STANDARDS

5.1 In the previous meeting of LITD 36, it was decided that the following standard shall be reprinted to replace the UDC number in the cover page with ICS-

* IS 12327 (Part 3) : 1989 Specification for data interchange on 130 mm double sided 3.8 tpmm high density flexible disk cartridge using 3 frequency modulation recording at 13 262 ftprad (Part 3 Track Format B For 80 Tracks)

It has been observed that the base standard ISO 8630-3 : 1987 has been withdrawn. It is therefore proposed that this IS may be withdrawn as well. The committee may please decide.

## Item 6 DATE AND PLACE OF NEXT MEETING

## Item 7 ANY OTHER BUSINESS

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# **Annex 1**

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| **Sl. No.** | **Organization** | **Member Name** |
| 1 | Government e Market Place, New Delhi | Shri Ajay Kr Rai |
| 2 | Canon India Private Limited, Gurugram | Shri Satoshi Hirabayashi |
| 3 | Canon India Private Limited, Gurugram | Shri Ashish Khanna |
| 4 | Centre for Development of Advanced Computing, Pune | Shri Rajesh Kushwaha |
| 5 | Centre for Development of Advanced Computing, Pune | Ms. Savita Kashyap |
| 6 | Computer Society of India, New Delhi | Prof. M. N. Hoda |
| 7 | Computers and Media Dealer's Association, New Delhi | Shri Puneet Singhal |
| 8 | Computers and Media Dealer's Association, New Delhi | Shri Manoj Khanna |
| 9 | Computers and Media Dealer's Association, New Delhi | Shri Pramod Rajpal |
| 10 | Dell Technologies, Gurugram | Shri Rajender Saini |
| 11 | Dell Technologies, Gurugram | Shri Prem Ananth |
| 12 | Electronics Regional and Test Laboratory (North), New Delhi | Shri M.P. Sharma |
| 13 | HP India Sales Private Limited, Bengaluru | Ms. Upasana Choudhry |
| 14 | HP India Sales Private Limited, Bengaluru | Ms. Anubhuti |
| 15 | HP India Sales Private Limited, Bengaluru | Ms. Mayuri Simaria Jain |
| 16 | Hewlett Packard India Sales Private Limited, Gurugram | Ms. Manjari Gopal |
| 17 | Infineon Technologies India Private Limited, Noida | Shri Madhusudhanan Sampath |
| 18 | Infineon Technologies India Private Limited, Noida | Shri Ajay Hanyalu |
| 19 | Manufacturers Association for Information Technology, New Delhi | Shri George Paul |
| 20 | Ministry of Electronics and Information Technology, New Delhi | Shri U. K. Nandwani |
| 21 | Ministry of Electronics and Information Technology, New Delhi | Ms. Asha Nangia |
| 22 | Ministry of Electronics and Information Technology, New Delhi | Shri Mukul Kumar Yadav |
| 23 | Ministry of Electronics and Information Technology- Standardization Testing and Quality Certification (STQC), New Delhi | Shri Manish Selal |
| 24 | Moser Baer India Limited, New Delhi | Shri. Yogesh Singhal |
| 25 | National Informatics Centre, New Delhi | Shri Rajdeep Choudhury |
| 26 | ST Microelectronics Private Limited, Greater Noida | Shri Prashant Pandey |
| 27 | Samsung India Electronics Private Limited, New Delhi | Shri Deepak Bharadwaj |
| 28 | Samsung India Electronics Private Limited, New Delhi | Shri Sanjay Kumar Bansal |
| 29 | The Institution of Electronics and Telecommunication Engineers, New Delhi | Dr. Jyotsna Kumar Mandal |
| 30 | The Institution of Electronics and Telecommunication Engineers, New Delhi | Prof. Nilesh N Kasat |
| 31 | UL India Private Limited, Bengaluru | Shri Ashish Mathur |
| 32 | UL India Private Limited, Bengaluru | Shri V. Manjunath |

**LITD 36/Panel 1**

|  |  |  |
| --- | --- | --- |
| **Sl. No.** | **Organization** | **Member Name** |
| 1 | Manufacturers Association for Information Technology, New Delhi | Shri George Paul |
| 2 | Canon India Private Limited, Gurugram | Shri Ashish Khanna |
| 3 | Centre for Development of Advanced Computing, Pune | Ms. Savita Kashyap |
| 4 | Dell Technologies, New Delhi | Shri Rajender Saini |
| 5 | Dell Technologies, New Delhi | Shri Prem Ananth |
| 6 | HP India Sales Private Limited, Bengaluru | Ms. Upasana Choudhry |
| 7 | HP India Sales Private Limited, Bengaluru | Ms. Mayuri Simaria Jain |
| 8 | Ministry of Electronics and Information Technology- Standardization Testing and Quality Certification (STQC), New Delhi | Shri Manish Selal |
| 9 | TVS Electronics Limited, Chennai | Ms. Vijayavani |
| 10 | TVS Electronics Limited, Chennai | Shri Ramachandran Ramalingam |

**LITD 36/Panel 2**

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| **Sl. No.** | **Organization** | **Member Name** |
| 1 | Manufacturers Association for Information Technology, New Delhi | Shri George Paul |
| 2 | Canon India Private Limited, Gurugram | Shri Ashish Khanna |
| 3 | Canon India Private Limited, Gurugram | Shri Rajeev Vashisht |
| 4 | Centre for Development of Advanced Computing, Pune | Ms. Savita Kashyap |
| 5 | Epson India Private Limited, Kolkata | Ms. Ashwini |
| 6 | HP India Sales Private Limited, Bengaluru | Shri Sudhakaran Nair |
| 7 | Konica | Shri Sanjay Monga |
| 8 | Sharp Business Systems (India) Private Limited, Noida | Ms. Madhu G |
| 9 | Sharp Business Systems (India) Private Limited, Noida | Shri Sukhdev Singh |

# **Annex 2**

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| **Sl. No.** | **IS No.** | **Title** |
| 1 | IS 1885 (Part 52/Sec 3) : 1980 | Electrotechnical vocabulary Part 52 data processing Sec 3 equipment technology |
| 2 | IS 1885 (Part 59) : 1986 | Electrotechnical vocabulary Part 69 educational or training equipment and systems |
| 3 | IS/ISO/IEC 10779 : 2020 | Information technology Office equipment Accessibility guidelines for older persons and persons with disabilities |
| 4 | IS 11402 (Part 1) : 1986ISO 3562:1976 | Interchangeable magnetic single disk cartridge top loaded Part 1 physical and magnetic characteristics |
| 5 | IS 11404 (Part 1) : 2018IS0 6596-1:1985 | Information processing - Data interchange on 130 mm 5 25 In flexible disk cartridges using twoFrequency recording at 7 958 ftprad 1 9 tpmm 48 Tpi on one side Part 1 dimensional physical and magnetic characteristics First Revision |
| 6 | IS 11404 (Part 2) : 1986ISO 6596-2:1985 | Specification for data interchange on 130 mm single sided 1 9 tpmm flexible disk cartridges using two frequency recording Part 2 track format |
| 7 | IS 11405 (Part 1) : 2018ISO 7487-1:1993 | Information technology - Data interchange on 130 mm 5 25 In flexible disk cartridges using 3 frequency modulation recording at 7 958 ftprad 1 9 tpmm 48 Tpi on both sides - Iso type 202 Part 1 dimensional physical and magnetic characteristics First Revision |
| 8 | IS 11405 (Part 2) : 1986ISO 7487-2:1986 | Specification for data interchange on 130 mm double sided 1 9 tpmm flexible disk cartridges using 3 frequency modulation recording Part 2 track format |
| **SI. No.** | **IS No.** | **Title** |
| 9 | IS 11405 (Part 3) : 2018ISO 7487-3:1986 | Information processing - Data interchange on 130 mm 525 in flexible disk cartridges using modified frequency modulation recording at 7 958 ftprad 19 tpmm 48 tpi on both sides PART 3 Track format B |
| 10 | IS 11406 : 1986ISO 7665:1983 | File structure and lABelling of flexible disk cartridges for information interchange |
| 11 | IS 11408 : 2006ISO 1864:1992 | Information technology - Unrecorded 12 7 mm 0 5 In wide magnetic tape for information interchange - 32 ftpmm 800 Ftpi nrzi 126 ftpmm 3 200 Ftpi phase encoded and 356 ftpmm 9 042 Ftpi nrzi First Revision |
| 12 | IS 11409 : 2006ISO/IEC 1863:1990 | Information processing - 9 - Track 12 7 mm 0 5 In wide magnetic tape for information interchange using NRZI at 32 ftpmm 800 Ftpi - 32 cpmm 800 Cpi First Revision |
| 13 | IS 11410 : 2006ISO/IEC 3788:1990 | Information processing - 9 - Track 12 7 mm 0 5 In wide magnetic tape for information interchange using phase encoding at 126 ftpmm 3 200 Ftpi - 63 cpmm 1 600 Cpi First Revision |
| 14 | IS 11411 : 1986ISO 5652:1984 | Specification for 9 - Track 12 7mm wide magnetic tape format and recording using group coding at 246 cpmm for information processing |
| 15 | IS 11419 : 2018ISO 1001:2012 | Information technology - File structure and labelling of magnetic tapes for information interchange Second Revision |
| 16 | IS 11853 (Part 1) : 1987ISO 8378-1:1986 | Data Interchange On 130 Mm Double Sided 3 8 Tpmm Flexible Disk Cartridges Using Modified Frequency Modulation Recording - Part 1 Dimensional Physical And Magnetic Characteristics |
| **SI. No.** | **IS No.** | **Title** |
| 17 | IS 11853 (Part 2) : 1986ISO DIS 8378-2:1986 | Specification for data interchange on 130 mm double sided 3 8 tpmm flexible disk cartridges using 3 frequency modulation recording Part 2 track format a |
| 18 | IS 11853 (Part 3) : 1986ISO DIS 8378-3:1986 | Data Interchange on 130 mm Double Sided 3 8 tpmm Flexible Disk Cartridge Using Modified Frequency Recording - Part 3 Track Format B |
| 19 | IS 12223 (Part 1) : 1987ISO 8063-1:1986 | Specification for 6 30 mm wide magnetic tape cartridge using imfm recording Part 1 mechanical physical and magnetic properties |
| 20 | [IS 12223 (Part 2) : 1989ISO 8063-2:1986](https://www.services.bis.gov.in/php/BIS_2.0/bisconnect/standard_review/Standard_review/Isdetails?ID=MzQ5OA%3D%3D) | Data Interchange on 6 30 mm Wide Magnetic Tape Cartridge Using IMFM Recording at 252 ftpmm - Part 2 Track Format and Method of Recording For Data Interchange in Start Stop Mode |
| 21 | IS 12327 (Part 1) : 1988ISO 8630-1:1987 | Information processing - Data interchange on 130 mm flexible disk cartridges using 3 frequency modulation recording at 13 262 ftprad on 80 tracks on each side Part 1 dimensional physical and magnetic characteristics |
| 22 | IS 12327 (Part 3) : 1989ISO 8630-3:1987 | Specification for data interchange on 130 mm double sided 3 8 tpmm high density flexible disk cartridge using 3 frequency modulation recording at 13 262 ftprad Part 3 Track Format B For 80 Tracks |
| 23 | IS 12660 : 1989ISO 4341:1978 | Information processing - Magnetic tape cassette and cartridge labelling and file structure for information interchange |
| 24 | IS/ISO/IEC 12862 : 2011 | Information Technology - 120 mm 8 54 Gbytes per Side and 80 mm 2 66 Gbytes per Side DVD Recordable Disk for Dual Layer DVD-R for DL |
| **SI. No.** | **IS No.** | **Title** |
| 25 | IS 12876 : 1989ISO 3407:1983 | Specification for information interchange on 3 81 mm magnetic tape cassette at 4 cpmm phase encoded at 63 ftpmm |
| 26 | IS 12922 (Part 1) : 1989IS0 9880-1 :1987 | Specification for 90 mm flexible disk cartridge using 3 - Frequency recording at 7 958 ftprad on 80 tracks on each side Part 1 dimensional physical and magnetic characteristics |
| 27 | IS 12922 (Part 2) : 1989ISO 8860-2:1987 | Specification for 90 mm flexible disk cartridge using 3 frequency r - Ecording at 7 958 ftprad on 80 tracks on each side Part 2 track format |
| 28 | IS/ISO/IEC 13170 : 2009 | Information Technology- 120 mm 8 54 Gbytes per Side and 80 mm 2 66 Gbytes per Side DVD Re-recordable Disk for Dual Layer DVD-RW for DL |
| 29 | IS 13737 : 1993ISO/IEC 10089:1991 | Information technology - 130 mm rewritABle optical disk cartridge for information interchange |
| 30 | [IS 13738 (Part 1) : 1993ISO/IEC 9529-1:1989](https://www.services.bis.gov.in/php/BIS_2.0/bisconnect/standard_review/Standard_review/Isdetails?ID=NTQ4Ng%3D%3D) | Information processing systems - Data interchange on 90 mm flexible disk cartridges using 3 frequency modulation recording at 15 916 ftprad on 80 tracks on each side Part 1 dimensional physical and magnetic characteristics |
| 31 | IS 13738 (Part 2) : 1993ISO/IEC 9529-2:1989 | Information processing systems - Data interchange on 90 mm flexible disk cartridges using 3 frequency modulation recording at 15 916 ftprad on 80 tracks on each side Part 2 track - Format |
| 32 | IS 14175 : 2018ISO 9293:1994 | Information technology - Volume and file structure of disk cartridges for information interchange First Revision |
| 33 | IS 14176 : 1994ISO 9660:1988 | Information processing - Volume and file structure of CD - ROM for information interchange |
| 34 | IS 14441 : 1997 | Specification for keyboard |
| **SI. No.** | **IS No.** | **Title** |
| 35 | [IS 14486 : 1997](https://www.services.bis.gov.in/php/BIS_2.0/bisconnect/standard_review/Standard_review/Isdetails?ID=NjM5Mg%3D%3D) | General purpose dot matrix printer - Specificaiton |
| 36 | IS 14701 : 1999ISO/IEC 10090:1992 | Information technology - 90 mm optical disk cartridges rewritable and read only for data interchange |
| 37 | IS 14886 : 2000 | Switch mode power supply - Specificaiton |
| 38 | IS 14896 : 2001 | Personal computer - Specificaiton |
| 39 | IS 15189 : 2002ISO/IEC 10149:1995 | Information technology - Data interchange on read - Only 120 mm optical data disks Cd - Rom |
| 40 | IS/ISO/IEC 16824 : 1999 | Information Technology - 120 mm DVD Rewritable Disk DVD-RAM |
| 41 | IS/ISO/IEC 16963 : 2015 | Information Technology- Digitally Recorded Media for Information Interchange and Storage - Test Method for the Estimation of Lifetime of Optical Disks for Long-Term Data Storage |
| 42 | IS/ISO/IEC 17342 : 2004 | Information Technology- 80 mm 1 46 Gbytes per Side and 120 mm 4 70 Gbytes per Side DVD Re-Recordable Disk DVD-RW |
| 43 | IS/ISO/IEC 17592 : 2004 | Information Technology - 120 mm 4 7 Gbytes per Side and 80 mm 1 46 Gbytes per Side DVD Rewritable Disk DVD-RAM |
| 44 | [IS 17886 (Part 2) : 2022ISO/IEC 11160-2:2021](https://www.services.bis.gov.in/php/BIS_2.0/bisconnect/standard_review/Standard_review/Isdetails?ID=Mjc2NDQ%3D) | Information technology Office equipment Minimum information to be included in specification sheets Printers Part 2 Class 3 and Class 4 printers |
| 45 | IS/ISO/IEC 19752 : 2017 | Information technology Office equipment Method for the determination of toner cartridge yield for monochromatic electrophotographic printers and multi-function devices that contain printer components |
| **SI. No.** | **IS No.** | **Title** |
| 46 | IS/ISO/IEC 19798 : 2017 | Information technology Office equipment Method for the determination of toner cartridge yield for colour printers and multi-function devices that contain printer |
| 47 | [IS/ISO/IEC 19799 : 2007](https://www.services.bis.gov.in/php/BIS_2.0/bisconnect/standard_review/Standard_review/Isdetails?ID=Mjc1MDM%3D) | Information technology Method of measuring gloss uniformity on printed pages |
| 48 | IS/ISO/IEC 20563 : 2001 | Information Technology 80 mm 1 23 Gbytes per Side and 120 mm 3 95 Gbytes per Side DVD-Recordable Disk DVD-R |
| 49 | IS/ISO/IEC 23912 : 2005 | Information Technology 80 mm 1 46 Gbytes per Side and 120 mm 4 70 Gbytes per Side DVD Recordable Disk DVD-R |
| 50 | IS/ISO/IEC 24735 : 2021 | Information technology Office equipment Method for measuring digital copying productivity |
| 51 | IS/ISO/IEC 29142-1 : 2013 | Information Technology - Print Cartridge Characterization Part 1 General Terms Symbols Notations and Cartridge Characterization Framework |
| 52 | IS/ISO/IEC 29142-2 : 2013 | Information Technology - Print Cartridge Characterization Part 2 Cartridge Characterization Data Reporting |
| 53 | IS/ISO/IEC 29142-3 : 2013 | Information Technology - Print Cartridge Characterization Part 3 Environment |