

# BUREAU OF INDIAN STANDARDS

## Program of Work

### LITD 14 : Software And System Engineering

**Scope:** To prepare Indian standards relating to: a) Processes, supporting tools and supporting technologies for the engineering of software products and systems. b) IT service management and IT governance

**Liaison:** **ISO/IEC/JTC1 TC- SC-40 (P):** *IT service management and IT governance* **ISO/IEC/JTC1 TC- SC-7 (P):** *Software and systems engineering* **ISO/IEC/JTC1 TC- SC-7 (Convenorship):** *Business planning group* **ISO/IEC/JTC1 TC- SC-7 (Convenorship):** *Communications and outreach* **ISO/IEC/JTC1 TC- SC-7 (Convenorship):** *Architecture and future watch* **ISO/IEC/JTC1 TC- SC-7 (Convenorship):** *Green software*

## Published Standards

S.No	IS No.	TITLE	Reaffirm M-Y	No. of Amds	Eqv.
1	IS 11289 : 2023 ISO/IEC 14756 : 1999 <b>ISO/IEC 14756 : 1999</b>	Information technology Measurement and rating of performance of computer-based software systems		-	Identical under dual numbering
2	IS 11291 (Part 1) : 2023 ISO/IEC 29119-1 : 2022 <b>ISO/IEC 29119-1 : 2022</b>	Software and systems engineering Software testing Part 1: General concepts		-	Identical under dual numbering
3	IS 11291 (Part 2) : 2023 ISO/IEC 29119-2 : 2021 <b>ISO/IEC 29119-2 : 2021</b>	Software and systems engineering Software testing Part 2: Test processes		-	Identical under dual numbering
4	IS 11291 (Part 3) : 2023 ISO/IEC 29119-3 : 2021 <b>ISO/IEC 29119-3 : 2021</b>	Software and systems engineering Software testing Part 3: Test documentation		-	Identical under dual numbering
5	IS 11291 (Part 4) : 2023 ISO/IEC 29119-4 : 2021 <b>ISO/IEC 29119-4 : 2021</b>	Software and systems engineering Software testing Part 4: Test techniques		-	Identical under dual numbering
6	IS 12372 : 1987 ISO 5806: 1987[E]	Presentation of single - Hit decision tABLEs	June, 2021	-	Identical under dual numbering

	Reviewed In : 2021 ISO 5806: 1987[E]				
7	IS 12373 (Part 1) : 2018 ISO/IEC 7498-1 : 1994 Reviewed In : 2021 ISO 7498-1984[E]	Information technology - Open systems interconnection - Basic reference model: Part 1 the basic model (First Revision)	September, 2021	-	Identical under dual numbering
8	IS 12373 (Part 2) : 1992 ISO 7498-2 Reviewed In : 2023 ISO 7498-2	Basic reference model of open systems interconnection for information processing systems: Part 2 Security architecture	June, 2023	-	Identical under dual numbering
9	IS 12373 (Part 3) : 2018 ISO/IEC 7498-3 : 1997 Reviewed In : 2021 ISO/IEC 7498-3 : 199	Information technology - Open systems interconnection - Basic reference model: Part 3 naming and addressing (First Revision)	June, 2021	-	Identical under dual numbering
10	IS 12373 (Part 4) : 1993 ISO/IEC 7498-4 Reviewed In : 2023 ISO/IEC 7498-4	Basic reference model of open systems interconnection for information processing systems: Part 4 management framework	June, 2023	-	Identical under dual numbering
11	IS 13394 : 2021 ISO/IEC 26514 : 2008 ISO/IEC 26514 : 2008	Systems and software engineering Requirements for designers and developers of user documentation(First Revision)		-	Identical under dual numbering
12	IS 13587 : 1992 ISO 8790 Reviewed In : 2022 ISO 8790	Computer system configuration diagram symbols and conventions for information processing systems	November, 2022	-	Identical under dual numbering
13	IS 13615 : 2020 ISO/IEC 15953 : 1999 Reviewed In : 2023 ISO/IEC 15953 : 1999	Information Technology - Open Systems Interconnection - Service Definition for the Application Service Object Association Control Service Element ( First Revision )	November, 2023	-	Identical under dual numbering
14	IS 13672 : 2018 ISO/IEC 9545 : 1994 Reviewed In : 2021 ISO/IEC 9545 : 1994	Information technology - Open systems interconnection - Application layer structure (First Revision)	June, 2021	-	Identical under dual numbering
15	IS 13675 (Part 1/Sec 1) : 1993 ISO/IEC 9072-1 Reviewed In : 2022 ISO/IEC 13712-1 : 1995	Remote operations in text communication for information processing systems: Part 1 model, notation and service definition	June, 2022	-	Identical under dual numbering
16	IS 13675 (Part 1) : 2023 ISO/IEC 13712-1 : 1995 ISO/IEC 13712-1 : 1995	Information Technology Remote Operations Part 1 Section 1 Concepts Model and Notation		-	Identical under dual numbering
17	IS 13675 (Part 1/Sec 2) : 2023 ISO/IEC 13712-2 :	Information Technology $i_2^{1/2}$ Remote Operations: OSI Realizations Part 1 Section 2		-	Identical under dual numbering

	1995 ISO/IEC 13712-2 : 1995	Remote Operations Service Element (ROSE) Service Definition			
18	IS 13675 (Part 2) : 2022 ISO/IEC 13712-3 : 1995 ISO/IEC 13712-3 : 1995	Information technology -Remote Operations: OSI realizations- Part 2 Remote Operations service Element (ROSE) i <sub>c</sub> ½ Protocol specification		-	Identical under dual numbering
19	IS 13706 : 2020 ISO/IEC 8650 Reviewed In : 2023 ISO/IEC 15954 : 1999	Information Technology - Open Systems Interconnection - Connection-mode Protocol for the Application Service Object Association Control Service Element ( First Revision )	December, 2023	-	Identical under dual numbering
20	IS 13706 (Part 2) : 2016 ISO/IEC 8650-2 : 1997 Reviewed In : 2022 ISO/IEC 8650-2 : 1997	Information technology - Open systems interconnection - Protocol specification for the association control service element: protocol implementation conformance statement (PICS) performa	June, 2022	-	Identical under dual numbering
21	IS 13707 (Part 1) : 1993 ISO/IEC 9066-1 Reviewed In : 2023 Reaffirmed but not taken up for revision ISO/IEC 9066-1	ReliABLE transfer in text communication for information processing systems: Part 1 model and service definition	June, 2023	-	Identical under dual numbering
22	IS 13707 (Part 2) : 1993 ISO/IEC 9066-2 Reviewed In : 2023 Reaffirmed but not taken up for revision ISO/IEC 9066-2	ReliABLE transfer in text communication for information processing systems: Part 2 protocol specification	June, 2023	-	Identical under dual numbering
23	IS 14639 : 2021 ISO/IEC 25051 : 2014 ISO/IEC 25051 : 2014	Software engineering Systems and software Quality Requirements and Evaluation SQuaRE Requirements for quality of Ready to Use Software Product RUSP and instructions for Testing First Revision		-	Identical under dual numbering
24	IS 14653 : 2014 ISO/IEC 14102 Reviewed In : 2023 ISO/IEC 14102 : 2008	Information technology - Guideline for the evaluation and selection of case tools (First Revision)	September, 2023	-	Identical under dual numbering
25	IS 16124 : 2020 ISO/IEC/IEEE 12207 : 2017 Reviewed In : 2023 ISO/IEC/IEEE12207: 2017	Systems and Software Engineering - Software Life Cycle Processes ( First Revision )	December, 2023	-	Identical under dual numbering
26	IS 16417 : 2015 ISO/IEC 25001:2014 Reviewed In : 2021 ISO/IEC 25001:2014	Software engineering - Software product quality requirements and evaluation (Square) - Planning and management	November, 2021	-	Identical under dual numbering

27	IS 16419 (Part 1) : 2020 ISO/IEC 19770-1 : 2017 Reviewed In : 2023 19770-1 : 2017	Information Technology — IT Asset Management Part 1 IT Asset Management Systems - Requirements ( First Revision )	November, 2023	-	Identical under dual numbering
28	IS 16419 (Part 2) : 2022 ISOIEC 19770-2 : 2015 ISOIEC 19770-2 : 2015	Information technology Software asset management Part 2: Software identification tag		-	Identical under dual numbering
29	IS 16419 (Part 3) : 2021 ISO/IEC 19770-3 : 2016 ISO/IEC 19770-3 : 2016	Information technology IT asset management Part 3: Entitlement schema		-	Identical under dual numbering
30	IS 16443 : 2024 ISO/IEC 25010 ISO/IEC 25010	Systems and Software Engineering “ Systems and Software Quality Requirements and Evaluation (Square) ” Product Quality Model (First Revision)		-	Identical under dual numbering
31	IS 16445 : 2016 Reviewed In : 2022 ISO/IEC 25012 : 2008	Software engineering - Software product quality requirements and evaluation (Square) - Data quality model	October, 2022	-	Identical under dual numbering
32	IS 16446 : 2021 ISO/IEC 25020 : 2019 ISO/IEC 25020 : 2019	Systems and software engineering Systems and software Quality Requirements and Evaluation SQuARE Quality measurement framework First Revision		-	Identical under dual numbering
33	IS 16447 : 2016 ISO/IEC 25021 : 2012 Reviewed In : 2022 ISO/IEC 25021 : 2012	Systems and software engineering - Systems and software quality requirements and evaluation (Square) - Quality measure elements	July, 2022	-	Identical under dual numbering
34	IS 16448 : 2021 ISO/IEC 25030 : 2019 ISO/IEC 25030 : 2019	Systems and software engineering — Systems and software quality requirements and evaluation (SQuARE) — Quality requirements framework (First Revision)		-	Identical under dual numbering
35	IS 16456 : 2024 ISO/IEC 14764:2022 ISO/IEC 14764:2022	Software engineering - Software life cycle processes Maintenance (First Revision)		-	Identical under dual numbering
36	IS 16457 : 2020 ISO/IEC/IEEE 15288 : 2015 Reviewed In : 2023 ISOIECIEEE15288: 2015	Systems and Software Engineering - System Life Cycle Processes ( First Revision )	December, 2023	-	Identical under dual numbering
37	IS 16458 : 2023 ISO/IEC/IEEE 16085 : 2021 ISO/IEC/IEEE 16085 : 2021	Systems and software engineering Life cycle processes Risk management		-	Identical under dual numbering

38	IS 16458 : 2015 ISO/IEC 16085 : 2006 Reviewed In : 2021 ISO/IEC/IEEE 16085 : 2021	Systems and software engineering - Life cycle processes - Risk management	November, 2021	-	Identical under dual numbering
39	IS 16845 : 2019 ISO/IEC 25000 : 2014 Reviewed In : 2022 ISO/IEC25000:2014	Systems and software engineering - Systems and software quality requirements and evaluation (Square) - Guide to square	April, 2022	-	Identical under dual numbering
40	IS 17041 : 2018 Reviewed In : 2021	Software Quality Engineering “Development Process” Software Development Management System ( SDMS ) Requirements	October, 2021	-	Indigenous
41	IS 17548 : 2021	Software and Systems Engineering – Core Agile Practices		-	Indigenous
42	IS 17743 (Part 1) : 2021 ISO/IEC 29110-1 : 2016 ISO/IEC 29110-1 : 2016	Systems and software engineering Lifecycle profiles for Very Small Entities VSEs Part 1: Overview		-	Identical under dual numbering
43	IS 17743 (Part 2/Sec 1) : 2021 ISO/IEC 29110-2-1 : 2015 ISO/IEC 29110-2-1 : 2015	Software Engineering Lifecycle profiles for Very Small Entities VSEs Part 2: Framework and taxonomy		-	Identical under single numbering
44	IS/ISO/IEC 20000-1 : 2018 IS/ISO/IEC 20000-1 : 2018 Reviewed In : 2023 ISO/IEC 20000 (PART 1) : 2018	Information Technology - Service Management Part 1 Service Management System Requirements ( Second Revision )	March, 2023	-	Identical under single numbering
45	IS/ISO/IEC 20000-2 : 2019 ISO/IEC 20000 (PART 2) : 2019	Information technology - Service management - Part 2: Guidance on the application of service management systems (Second Revision)		-	Identical under single numbering
46	IS/ISO/IEC 20000-3 : 2019 ISO/IEC 20000 (PART 3) : 2019 ISO/IEC 20000 (PART 3) : 2019	Information technology - Service management - Part 3: Guidance on scope definition and applicability of ISOIEC 20000-1 (First Revision)		-	Identical under single numbering
47	IS/ISO/IEC/TR 20000-5 : 2013 Reviewed In : 2021 ISO/IEC 20000-5:2013	Information Technology - Service Management Part 5 Exemplar Implementation Plan for IS/ISO/IEC TR 20000-5	October, 2021	-	Identical under single numbering
48	IS/ISO/IEC 20000-10 : 2018 ISO/IEC 20000 (PART	Information Technology Service Management Part 10 Concepts and Vocabulary (First Revision)		-	Identical under single numbering

	ISO/IEC 20000 (PART 10) : 2018				
49	IS/ISO/IEC/TS 30103 : 2015 ISO/IEC TS 30103 : 2015 Reviewed In : 2021 ISO/IEC 30103:2015	Software and Systems Engineering - Lifecycle Processes - Framework for Product Quality Achievement	June, 2021	-	Identical under single numbering
50	IS/ISO/IEC 30105-1 : 2016 ISO/IEC 30105-1 : 2016 Reviewed In : 2021 ISO/IEC 30105-1 : 2016	Information Technology - IT Enabled Services - Business Process outsourcing (ITES-BPO) Lifecycle Processes Part 1 Process Reference Model (PRM)	January, 2021	-	Identical under single numbering
51	IS/ISO/IEC 30105-2 : 2016 ISO/IEC 30105-2 : 2016 Reviewed In : 2024 ISO/IEC 30105-2 : 2016	Information Technology - IT Enabled Services - Business Process Outsourcing (ITES - BPO) Lifecycle Process Part 2 Process Assessment Model (PAM)	January, 2024	-	Identical under single numbering
52	IS/ISO/IEC 30105-3 : 2016 ISO/IEC 30105-3 : 2016 Reviewed In : 2021 ISO/IEC 30105-3 : 2016	Information Technology - IT Enabled Services - Business Process Outsourcing (ITES -BPO) Lifecycle Processes Part 3 Measurement Framework (MF) and Organization Maturity Model (OMM)	January, 2021	-	Identical under single numbering
53	IS/ISO/IEC 30105-4 : 2016 ISO/IEC 30105-4 : 2016 Reviewed In : 2021 ISO/IEC 30105-4 : 2016	Information Technology - IT Enabled Services - Business Process Outsourcing (ITES-BPO) Lifecycle Processes Part 4 Terms and Concepts	January, 2021	-	Identical under single numbering
54	IS/ISO/IEC 30105-5 : 2016 ISO/IEC 30105-5 : 2016 Reviewed In : 2021 ISO/IEC 30105-5 : 2016	Information Technology - IT Enabled Services Business Process Outsourcing (ITES - BPO) Lifecycle Processes Part 5 Guidelines	January, 2021	-	Identical under single numbering
55	IS/ISO/IEC 30130 : 2016 ISO/IEC 30130:2016 ISO/IEC 30130:2016	Software engineering Capabilities of software testing tools		-	Identical under dual numbering
56	IS/ISO/IEC/IEEE 42010 : 2011 ISO/IEC/IEEE 42010 : 2011 Reviewed In : 2021	Systems and Software Engineering - Architecture Description	September, 2021	-	
57	IS/ISO/IEC/IEEE 42020 : 2019 ISO/IEC/IEEE 42020 : 2019 ISO/IEC/IEEE 42020 : 2019	Software systems and enterprise Architecture processes		-	Identical under single numbering

58	IS/ISO/IEC/IEEE 42030 : 2019 ISO/IEC/IEEE 42030 : 2019 ISO/IEC/IEEE 42030 : 2019	Software systems and enterprise Architecture evaluation framework		-	Identical under single numbering
59	IS/ISO/IEC 90003 : 2018 ISO/IEC 90003 : 2014 Reviewed In : 2023 ISO/IEC/IEEE90003: 2018	Software engineering Guidelines for the application of ISO 9001:2008 to computer software	December, 2023	-	Identical under single numbering

### Standards under Development

#### Projects Approved

SI. No.	Doc No.	Title
1	LITD 14 (25192)	Information technology Governance of IT for the organization
2	LITD 14 (25193)	Information technology IT Enabled Services-Business Process Outsourcing ITES-BPO lifecycle processes Part 6 Guidelines on risk management
3	LITD 14 (25194)	Information technology IT Enabled Services-Business Process Outsourcing ITES-BPO lifecycle processes Part 7 Exemplar for maturity assessment
4	LITD 14 (25197)	Information technology -IT Enabled Services-Business Process Outsourcing ITES-BPO lifecycle processes Part 8 Continual performance improvement CPI of ITES-BPO
5	LITD 14 (25198)	Information technology IT Enabled Services-Business Process Outsourcing ITES-BPO lifecycle processes Part 9 Guidelines on extending process capability assessment for digital transformation
6	LITD 14 (25199)	Systems and software engineering Engineering and management of websites for systems software and services information
7	LITD 14 (26055) Revision of: IS/ISO/IEC 30105:2016	Information Technology - IT Enabled Services - Business Process Outsourcing ITES-BPO Part 4 Process Assessment Model PAM First Revision
8	LITD 14 (26057) Revision of: IS 13394:2021	Systems and software engineering Requirements for designers and developers of user documentation Second Revision

#### Preliminary Draft Standards

SI. No.	Doc No.	Title
<i>No Records Found</i>		

#### Drafts Standards in WC Stage

SI. No.	Doc No.	Title
<i>No Records Found</i>		

#### Draft Standards Completed WC Stage

SI. No.	Doc No.	Title
<i>No Records Found</i>		

#### Finalized Draft Indian Standard

SI. No.	Doc No.	Title
<i>No Records Found</i>		

#### Finalized Draft Indian Standards under Print



SI. No.	Doc No.	Title
1	LITD 14 (19326)	Information Technology - Adequacy of Organizational Data Governance and Management Practices
2	LITD 14 (21947) Revision of: IS 16457:2020	Systems and software engineering- System life cycle processes Second Revision
3	LITD 14 (21948) Revision of: IS/ISO/IEC/TR 20000:2013	Information technology Service management Part 5 Implementation guidance for IS ISO IEC 20000-1 First Revision
4	LITD 14 (21949) Revision of: IS/ISO/IEC/IEEE 42010:2011	Software Systems and Enterprise Architecture Description First Revision

**Total Published Standards:56 Total Standards Under development:12**

### Aspect Wise Report

Product : 0  
 Code of Practices : 7  
 Methods of Test : 3  
 Terminology : 6  
 Dimensions : 0  
 System Standard : 5  
 Safety Standard : 0  
 Others : 27  
 Service Specification : 3  
 Process Specification : 5  
 Unclassified : 1

### Annexure-I :List of Indian Standards Withdrawn/Superseded

SI. No.	IS No. & Year	Title
1	IS 10934 : 1983 ISO 3307: 1975[E] Reviewed In : 2019 ISO 3307: 1975[E]	Representations of time of the day
2	IS 10935 : 1983 ISO 2711-1975[E] Reviewed In : 2019 ISO 2711-1975[E]	Representation of ordinal dates
3	IS 10992 (Part 3) : 1984 Reviewed In : 2000	High Speed Tubeless Tyres for Civil Aircraft - Part 3 Qualification Tests
4	IS 11291 : 1985 Reviewed In : 2019	Code of practice for testing of computer based systems
5	IS 11365 : 1985 ISO 4031 Reviewed In : 2019 ISO 4031	Representation of local time differential for information interchange
6	IS 13392 : 1992 ISO 6593 Reviewed In : 2016 ISO 6593	Programme flow for processing sequential files in terms of record groups for information processing
7	IS 13553 : 1993 ISO 9127 Reviewed In : 2016 ISO 9127	User documentation and cover information for consumer software packages for information processing systems
8	IS 13557 (Part 14) : 1993 Reviewed In : 2019 ISO 2382-14	Information processing systems - vocabulary Part 14 reliability maintenance and availability
9	IS 13557 (Part 18) : 1999	Information processing systems - vocabulary Part 18 distributed data processing



	ISO 2382-18 Reviewed In : 2019 ISO 2382-18	
10	IS 14638 : 1998 ISO/IEC 9126 Reviewed In : 2019 ISO/IEC 9126	Information technology - Software product evaluation - Quality characteristics and guidelines for their use
11	IS 14692 (Part 1) : 1999 ISO/IEC 2382-1 Reviewed In : 2019 ISO/IEC 2382-1	Information technology - vocabulary Part 1 fundamental terms
12	IS 1885 (Part 52/Sec 2) : 1980 Reviewed In : 2019 ISO 2382-2	Electrotechnical vocabulary Part 52 data processing Sec 2 arithmetic and logic operations
13	IS 1885 (Part 52/Sec 7) : 1980 Reviewed In : 2019 ISO 2382-5	Electrotechnical vocabulary Part 52 data processing Sec 7 digital computer programming
14	IS 1885 (Part 52/Sec 10) : 1980 Reviewed In : 2019 ISO 2382-10	Electrotechnical vocabulary Part 52 data processing Sec 10 data communication
15	IS 1885 (Part 52/Sec 11) : 1981 Reviewed In : 2019 ISO 2382-10	Electrotechnical vocabulary Part 52 data processing Sec 11 operating techniques and facilities
16	IS 1885 (Part 52/Sec 13) : 1980 Reviewed In : 2019 ISO 2382-19	Electrotechnical vocabulary Part 52 data processing Sec 13 analogue and hybrid computing
17	IS 1885 (Part 52/Sec 14) : 1983 Reviewed In : 2019 ISO 2382-13	Electrotechnical vocabulary Part 52 data processing Sec 14 computer graphics and computer micrographics
18	IS/ISO/IEC/TR 20000-4 : 2010 ISO/IEC 20000-4 : 2010 ISO/IEC 20000-4 : 2010	Information Technology Service Management Part 4 Process Reference Model
19	IS/ISO/IEC/TR 20000-9 : 2015 ISO/IEC TR 20000-9 : 2015 ISO/IEC 20000 : Part 9 : 2015	Information Technology Service Management Part 9 Guidance on the Application of ISO IEC 20000-1 to Cloud Services
20	IS 2902 : 1964	Fixed carbon film resistors Type 1
21	IS 2903 : 1964	Fixed carbon film resistors Type 2
22	IS 2934 : 1964	Non-wire-wound variable resistors potentiometers Type 2 7 Part 1 Tests and general requirements
23	IS 3373 (Part 1) : 1965	Wirewound resistors Type II Part 1 Tests and general requirements
24	IS 3373 (Part 2) : 1966	Wirewound resistors Type II Part 2 Vitreous enamelled
25	IS 4114 : 1967	Code of practice for laying of cast iron pipes Second Revision
26	IS 5786 (Part 2) : 1982 Reviewed In : 2000	Fixed Resistors General Purpose Low Power - Part 2 Resistors Type FRLP 1

27	IS 5786 (Part 8) : 1982 Reviewed In : 2000	Fixed Resistors General Purpose Low Power - Part 8 Resistor Type FRLP 7
28	IS 5786 (Part 9) : 1976	Fixed resistors general purpose low power Part 9 resistors type FRLP 8
29	IS 5786 (Part 11) : 1969	Fixed resistors general purpose low power Part 11 Type FRLP 10
30	IS 825 : 1956	Colour Code For Fixed Resistors

**Annexure-II :List of Indian Product Standards**

SI. No.	IS No. & Year	Title
<i>No Records Found</i>		