



MINUTES

DOCUMENT DESPATCH ADVICE

TECHNICAL COMMITTEE: LITD 14

Ref	Date
LITD 14/A-2.22	19-12-2022

All Members of LITD 14

TWENTY SECOND MEETING OF SOFTWARE AND SYSTEMS ENGINEERING
SECTIONAL COMMITTEE, LITD 14 AND ITS PANELS

DATE, DAY & TIME:

VENUE

07 Nov 2022

Monday

Webex

TIME: 1100-1330h

<https://bisindia.webex.com/bisindia/j.php?MTID=m5051eb421cb73c0b89401ab9ffa4783c>

Dear Sir(s),

Further to our Meeting of even number dated 07 Nov 2022, please find enclosed the MINUTES for the Twenty Second Meeting of above referred Committee, LITD 14.

Comments, if any, related to recording of the minutes may please be communicated to the undersigned latest by 25 Dec 2022.

Thanking you,

Yours Sincerely,

Encl: As above

Sd/-

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BUREAU OF INDIAN STANDARDS
MINUTES

**TWENTY SECOND MEETING OF SOFTWARE AND SYSTEMS ENGINEERING
SECTIONAL COMMITTEE, LITD 14
IN JOINT SESSION WITH THE PANELS**

DATE, DAY & TIME: VENUE

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CHAIRMAN: 1Prof. Rajat Moona, IIT Gandhinagar**MEMBER SECRETARY:** 2 Shri Ashish Tiwari

Members Present:

3.	Anupam Agrawal	TCS
4	Dr Anand Kumar	TCS
5	Ms Nayana Pandit	TCS
6	Ms Gayathri Ekambaram	TCS
7	Ms Preeti Kate	TCS
8	Ms Sharmila Mookerjee	TCS
9	Sh Kishore Gopinath	Individual Capacity
10	Sh Sanjiv Agarwala	Oxygen Consulting
11	Sh Onkar.Adwal	Individual Capacity
12	Dr Sundeep Oberoi	TCS

ITEM 0 GENERAL

0.1 The Member Secretary welcomed all the members to the Twenty Second meeting of LITD 14. He informed the committee regarding the activities of various Working Group under LITD 14 and briefed the committee about the plenary meetings of SC 7 and SC 40 scheduled to be held during June 2022. He informed members about the different positions related to various projects emerged during these meetings. He then requested Chair for delivering his welcome address.

0.2 Prof. Moona extended warm welcome to all the members present and requested all the members for their effective and constructive contribution in standardization activities of the committee. He congratulated members on the work done on agile standard and suggested ways about how we can promote this standard. He requested Panel 13 to complete their work towards Data Maturity Assessment Model and provide the first draft as soon as possible. He then requested member secretary to carry on with the further agenda items.

ITEM 1 FORMAL CONFIRMATION OF THE MINUTES OF THE LAST MEETING

1.1 There being no comments from the members, the Committee formally confirmed the minutes of its last meeting held on 04 Oct 2021 held via webex.

ITEM 2 DRAFT INDIAN STANDARDS IN WIDE CIRCULATION

2.1 The member Secretary informed about the status of following draft standards which are in wide circulation. The last date of comments was 22 Sep 2022.

Sl No.	Document No.	IS No.	Latest ISO/IEC No.	Title
1	LITD/14/18453	IS 16458	ISO/IEC/IEEE 16085 : 2021	Systems and software engineering Life cycle processes Risk management (First Revision)
2	LITD/14/19278	IS 13675 (Part 1/Sec 1)	ISO/IEC 13712-1:1995	Information technology Remote Operations: Concepts model and notation (First Revision)
3	LITD/14/19319	IS 13675 (Part 1/Sec 2)	ISO/IEC 13712-2:1995	Information technology - Remote Operations: OSI realizations - Remote Operations Service Element ROSE Service definition (First Revision)
4	LITD/14/19320	IS 13675 (Part 2)	ISO/IEC 13712-3 : 1995	Information technology - Remote Operations: OSI realizations - Remote Operations Service Element ROSE protocol specification(First Revision)
5	LITD/14/19321	IS 11289 : 1985	ISO/IEC 14756 : 1999	Information technology Measurement and rating of performance of computer-based software systems (First Revision)
6	LITD/14/19322	IS 11291 (Part 1)	ISO/IEC 29119-1 : 2022	Software and systems engineering Software testing Part 1: General concepts (First Revision)
7	LITD/14/19323	IS 11291 (Part 2)	ISO/IEC 29119-2 : 2021	Software and systems engineering Software testing Part 2: Test processes(First Revision)
8	LITD/14/19324	IS 11291 (Part 3)	ISO/IEC 29119-3 : 2021	Software and systems engineering Software testing Part 3: Test documentation(First Revision)
9	LITD/14/19325	IS 11291 (Part 4)	ISO/IEC 29119-4 : 2021	Software and systems engineering Software testing Part 4: Test techniques (First Revision)

The committee discussed the comments received on LITD 14 (19322) and LITD 14/19323 which were given in Annex 3 of the Agenda. It was informed that the comments are mostly the improvements and suggestions and alternative texts are not available for some of the comments. It was felt that it would not be wise to have a separate standard for Indian stakeholders and we should have same standard which is being followed globally.

It was decided to finalize the above drafts for printing. The comment received will be forwarded to JTC 1/SC 7 as and when the revision of above standards are taken up.

ITEM 3 STATUS OF DATA MANAGEMENT PANEL (Panel 13)

3.1 Dr Sundeep Oberoi, Convener briefed the committee about the work done by this panel so far. He informed that the panel is currently working on developing a standard for the Organizational Data Maturity Model and Assessment Framework. The purpose of this standard is to enable evaluation of data maturity of an organization using a maturity model. The proposed standard will provide the methodology for evaluating the as-is maturity level of an organization objectively and identify the opportunities for improvement.

So far, this panel had more than 50 meetings and at present, the panel has been divided into 4 groups: Data Governance, Data Value Delivery Enablement, Risk Management & Foundational Practices. The first draft is likely to be get ready by next 2 months. Once the draft is available, it will be circulated as P Draft to committee members for comments.

The present composition of the panel is as follows:

Title : Data Management Panel

- a) Dr Sundeep Oberoi, Convener
- b) Sh Anupam Agrawal, TCS
- c) Santanu Ghosh, TCS
- d) Virendra Rathi, TCS
- e) Abhilash Varghese, Individual Capacity
- f) G Mayil Muthu Kumaran, NIC
- g) Dr Rajesh Ingle,
- h) Dr Neha Sharma, TCS
- i) Dr Kalpesh Parikh, TCS
- j) Elizabeth Koshy, TCS
- k) Sonali Khopkar, TCS
- l) Dr Vahida Zakirhusen Attar,
- m) Ms Leena Sagar, Capgemini

The committee appreciated the work done by this panel.

ITEM 4 STAUS OF AGILE PANEL (Panel 10)

4.1 Ms Nayana Pandit briefed the committee about the publication of IS 17548 – Core Agile Practices which is the first Indian standard on Agile. Further, she also informed about the further plans for developing standards on Agile.

- a) Software and Systems Engineering: Part –1 : Core Agile Practices (IS 17548)
- b) Software and Systems Engineering: Part -2 : Contracting in Agile Development Engagements
- c) Software and Systems Engineering: Part –3 : Agile Maturity and Readiness Level Evaluation Framework
- d) Software and Systems Engineering: Part -4 : Budgeting
- e) Software and Systems Engineering: Part -5 : Reference Model
- f) Software and Systems Engineering: Part -6 : Vocabulary

It was decided that Ms Nayana Pandit will focus on other SC 7 Working Groups where more active participation from India is required. It was decided that Ms Gayathri Ekambaram, TCS will be the Convener of Panel 10. The present composition of the panel is given below:

Ms Gayathri Ekambaram, TCS - Convener	Apeksha Sehdev (TCS)
Nayana Pandit, TCS	Ashwani Sharma (TCS)
Dr Anand Kumar (TCS)	Dinesh Mohata (TCS)
Anupam Agrawal (TCS)	Krishnan V (TCS)
Anuradha Deo (Capgemini)	Kulbir Raina (Capgemini)
Ashutosh Sabde (TCS)	Manikandan B (TCS)
Hrishikesh Karekar (Capgemini)	Preeti Kate (TCS)
Jaisankar Ts (TCS)	Robin John (TCS)
Ramprasad Vadde (Infosys)	Dr Sandeep Kumar (IIT, Roorkee)
Sailaja Parthasarathy (Intel)	Srilakshmi Balaprakhya (TCS)
Prof Sridhar Chimalakonda (IIT Tirupati)	Sujatha Rajesh (TCS)
Supratik Gupta (Support Elders Pvt Ltd)	Sumanth Bathula (Capgemini)
Sushanta Sinha (TCS)	Vasanthapriya Mohankumar (TCS)
Venkata Ravi (Wipro)	Vikram Balakrishna (Capgemini)
Vijay Krishnamoorthy (TCS)	
Vikram Merani (TCS)	

ITEM 5 STAUS OF DEVOPS PANEL (Panel 12)

5.1 This panel was constituted to develop Indian Standards in the area of DevOps. Ms Sharmila Mookerjee, Convener (Panel 12) updated the committee about the work of DevOps panel. She informed about the series of Webinars on DevOps and the proposed DevOps standards under consideration. The present composition of the panel is given below:

- a) Ms Sharmila Mookherji, TCS Convener
- b) Anupam Agrawal, TCS
- c) Sridhar Chimalakonda, IIT Tirupathi
- d) Vijay Krishnamoorthy, TCS
- e) Dr Sharvari Tamane, TCS
- f) Ms Nayana Pandit, TCS
- g) Ms Manisha Litoria (CDOT)

ITEM 6 ACTIVITIES OF PANELS OF LITD 14 VIS-À-VIS PLENARY MEETINGS OF SC 7 and SC 40

6.1 JTC 1/SC 7 SOFTWARE AND SYSTEMS ENGINEERING

6.1.1 The member secretary informed about the following major issues which will be discussed during the upcoming SC 7 Plenary Meetings. Further, Dr Sundeep Oberoi provided details on the SC 7 Plenary agenda as given below:

- a) NP from India in AI – Verification and Validation in AI systems(in JWG2)
- b) Adhoc on Open Source Software
- c) Adhoc on Digital Engineering

- d) New Convener for SC 7/WG 42
- e) New Proposals
 - i. ISO/IEC/IEEE 29119-5, Software and systems engineering — Software testing – Part 5: Keyword-driven testing,
 - ii. Systems and software engineering – Methods and tools for model-based system analysis by simulation
 - iii. Software and systems engineering – Capabilities of build and deployment tools

6.1.2 The member secretary informed about the WG meetings scheduled to be held alongwith SC 7 plenary meetings. Following presentations were made regarding the activities of various WGs of LITD 14 by their respective Conveners/members:

Sl No.	New Panel No.	Title	Convener
4	LITD14/ Panel 4	Life cycle management	Dr Anand Kumar
6	LITD14/ Panel 10	Agile and DevOps	Ms Gayathri Ekambaram
7	LITD14/ Panel 6	Architecture	Dr Anand Kumar

6.1.3 The committee discussed about the lack of Indian experts in come of the Working Groups of SC 7 in particular WG 26 Software Testing, WG 30 Systems Resilience and WG 10 Process Assessment. These areas are very much relevant to Indian IT companies and Stakeholders. The committee requested Ms Nayana Pandit to synergize and held in identifying the experts and create a pool of experts who will work in these working groups. Once we have enough experts, the committee will consider to create separate panels for these working groups.

6.2 JTC 1/SC 40 IT SERVICE MANAGEMENT AND IT GOVERNANCE

6.2.1 The member secretary informed about the following important issues which were discussed during SC 40 Plenary and WG Meetings during June 2022.

- a) Revision of ISO/IEC 30105 series IT enabled Services - BPO
- a) ISO/IEC PWI TS 20000-15 – Information Technology – Service Management – Part 15 -- Guidance on the application of Agile and DevOps principles in a service management system
- b) ISO/IEC WD TS 38508 Information Technology — Governance of IT — Governance Implications of the Use of Shared Digital Service Platform among Ecosystem Organizations
- c) Information technology — IT Enabled Services-Business Process Outsourcing (ITES-BPO) lifecycle processes — Part 9: Guidelines on maturity assessment to support digital transformation
- d) NWIP on Service Integration and Management

6.2.2 The committee decided to identify new convener for LITD 14/Panel 8 ‘IT Service Management’ who will lead the work towards this area.

ITEM 7 PRESENT POSITION OF WORK OF LITD 14

7.1 The committee noted the present position of work of LITD 14 as given in **Annex 3** of the agenda. The committee discussed the status of various Indian standards as given in **Item 7.2** of the agenda and decided as follows:

Sl No.	IS Number and Title	Equivalent International Standard	Latest position of corresponding Int. Standards	Decision of the committee
1.	IS 16443 Systems and software engineering - Systems and software quality requirements and evaluation Square - System and software quality models	ISO/IEC 25010	ISO/IEC DIS 25010	To circulate revised IS based on latest ISO Standard in wide circulation for a period of 2 months
2.	IS 16456 : 2016 Software engineering - Software life cycle processes - Maintenance	ISO/IEC 14764 : 2006	ISO/IEC 14764 : 2022	To circulate revised IS based on latest ISO Standard in wide circulation for a period of 2 months
3.	IS 16457 : 2020 Systems and Software Engineering - System Life Cycle Processes (First Revision)	ISO/IEC/IEE E15288:2015	ISO/IEC/IEEE FDIS 15288	To circulate revised IS based on latest ISO Standard in wide circulation for a period of 2 months
4.	IS/ISO/IEC/TR 20000-5 Information Technology - Service Management Part 5 Exemplar Implementation Plan for IS 20000-1	ISO/IEC/TR 20000-5 : 2013	ISO/IEC/TR 20000-5 : 2022	To circulate revised IS based on latest ISO Standard in wide circulation for a period of 2 months
5.	IS/ISO/IEC 42010 : 2011 Systems and Software Engineering - Architecture Description	ISO/IEC 42010 : 2011	ISO/IEC/IEEE 42010 : 2022	To circulate revised IS based on latest ISO Standard in wide circulation for a period of 2 months
6.	IS/ISO/IEC 20000-1 : 2018 Information Technology - Service Management Part 1 Service Management System Requirements (Second Revision)	ISO/IEC 20000-1 : 2018	ISO/IEC 20000-1 : 2018	There being no change in the ISO standard which has been recently revised with involvement of LITD 14 members, the committee decided to reaffirm this standard
7.	IS/ISO/IEC 30130 : 2016 Software engineering Capabilities of software testing tools	ISO/IEC 30130:2016	ISO/IEC 30130:2016	-Do-
8.	IS/ISO/IEC/IEEE 42020 : 2019 Software systems and enterprise Architecture processes	ISO/IEC/IEEE 42020 : 2019	ISO/IEC/IEEE 42020 : 2019	-Do-
9.	IS/ISO/IEC/IEEE 42030 : 2019 Software systems and enterprise Architecture evaluation framework	ISO/IEC/IEE E 42030 : 2019	ISO/IEC/IEEE 42030 : 2019	-Do-

7.2 Action Research of LITD 14 Standards

The member secretary informed about the action research project by which 6 LITD 14 Indigenous standards were reviewed. It was informed that the technology has changed drastically and we need to revise/withdraw some of these standards. The recommendations were circulated to all committee members for comments. Based on the recommendation, the committee decided as follows:

Sl No.	IS Number and Title	Decision of the Committee
1.	IS 13587 : 1992/ISO 8790 Computer system configuration diagram symbols and conventions for information processing systems	The committee considered the ARP report and was of the view that the symbols and conventions does not change and remain same. Hence, the standard may be reaffirmed.
2.	IS 12372 : 1987/ISO 5806: 1987[E] Presentation of single - Hit decision tables	The committee considered the ARP report and was of the view that such decision tables are used in processing systems and will remain same as these are conventions. Hence, the standard may be reaffirmed.

ITEM 8 COMPOSITION OF LITD 14

8.1 The committee noted the composition as given in the agenda. The committee requested members for suggesting nominations for panels where we are lacking participation particularly in WG 24, 26 and WG 10.

8.2 The committee decided to write to following members again for active participation:

- a) Cognizant Technologies Ltd
- b) IIIT Hyderabad

8.3 Further, the committee decided to co-opt INCOSE (India Chapter) as a member in LITD 14. Dr Anand Kumar will coordinate the nomination from INCOSE, India in LITD 14.

ITEM 9 INTERNATIONAL WORK

9.1 The committee noted the information as given in **Item 9** of the agenda. The committee requested members to identify the important ISO/IEC standards which may be taken up for adoption as Indian standard.

9.2 The committee decided to nominate following experts in ISO GD for the corresponding WGs:

Sl No.	ISO WGs	Expert to be nominated
1	SC 7/WG 29 Agile and DevOps	Ms Gayathri Ekambaram
2	SC 7/WG 30 System Resilience	Ms Nayana Pandit Ms Gayathri Ekambaram
3	SC 7/WG 7 Life Cycle Management	Dr Anand Kumar
4	JTC 1/SC 40 IT Service Management and IT Governance	Sh Sanjiv Agarwala, Oxygen consulting

9.3 Next plenary/interim meetings of JTC 1/SC 7 and SC 40

The member secretary informed the members about the schedule of plenary meetings of SC 7 and SC 40. The committee requested members to participate in large number in these meetings so as to safeguard India's interests in ISO standardization.

Further, BIS will also circulate the details about these meetings to all the members. Interested members may inform the same to BIS at the earliest. Further, the committee decided to nominate Ms Nayana Pandit, TCS as the Head of the Delegation in upcoming JTC 1/SC 7 Plenary meetings from India.

ITEM 10 DATE AND PLACE FOR THE NEXT MEETING

10.1 The members suggested to have the next meeting in the month of Jan/Feb 2023. It was decided to fix the exact date for the next meeting in consultation with the Chairman.

ITEM 11 ANY OTHER BUSINESS

11.1 There being no business left, the meeting ends with a vote of thanks to the chair.