



A G E N D A

TECHNICAL COMMITTEE: LITD 14

DOCUMENT DESPATCH ADVICE

| Ref            | Date       |
|----------------|------------|
| LITD 14/A-2.25 | 21-11-2023 |

All Members of LITD 14

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

(Hybrid Meeting, Vimarsha (Blue room), BIS Headquarter, ITO and WebEx)

|              |   |
|--------------|---|
| Time         | 1030h-1330h Thursday, November 23, 2023   |
| Meeting link | <a href="https://bismanak.webex.com/bismanak/j.php?MTID=m12cd700b60cb33e4578808447e0c26f2">https://bismanak.webex.com/bismanak/j.php?MTID=m12cd700b60cb33e4578808447e0c26f2</a> |
| Meeting ID   | 2518 821 5202   |
| Password     | LITD14@25   |

Dear Sir(s),

Further to our meeting notice of dated 23 Oct 2023, please find enclosed the AGENDA for the Twenty Fifth Meeting of above referred Committee and its Panels, LITD 14.

Kindly make it convenient to attend this meeting. We shall be thankful to have your confirmation in this respect.

Thanking you,

Yours Sincerely,

Sd/-

Encl: As above

(Ashish Tiwari)  
Scientist-D(Electronics & IT)  
Email: litd@bis.org.in  
Telefax:01123608501

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**BUREAU OF INDIAN STANDARDS**  
**AGENDA**

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

(Hybrid Meeting, Vimarsha (Blue room), BIS Headquarter, ITO and WebEx)

|              |   |
|--------------|---|
| Time         | 1030h-1330h Thursday, November 23, 2023   |
| Meeting link | <a href="https://bismanak.webex.com/bismanak/j.php?MTID=m12cd700b60cb33e4578808447e0c26f2">https://bismanak.webex.com/bismanak/j.php?MTID=m12cd700b60cb33e4578808447e0c26f2</a> |
| Meeting ID   | 2518 821 5202   |
| Password     | LITD14@25   |

**CHAIRMAN:** Dr Sundeep Oberoi

**MEMBER SECRETARY:** Shri Ashish Tiwari

**ITEM 0 GENERAL**

**0.1** Welcome

**0.2** Address by the chairman.

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

**1.1** The minutes of the last meeting of LITD 14 held on 09 Nov 2023 were circulated on 20 Nov 2023. No comments have been received.

**The committee may confirm the minutes.**

**ITEM 2 STATUS OF DATA MANAGEMENT PANEL (Panel 13)**

**2.1** This Panel was constituted to develop Indian Standard on Data Maturity Assessment and Benchmarking. 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. The panel is currently divided into 4 groups: Data Governance, Data Value Delivery Enablement, Risk Management & Foundational Practices. The present composition of the panel is given in Annex 1. The panel has sent following draft as WC Draft. Further, the public consultation on the document was held on 18 Sep 2023 to discuss the public comments.

| <b>Sl No.</b> | <b>Document Number</b> | <b>Title</b>   | <b>Last date for comments</b> |
|---------------|------------------------|--|-------------------------------|
| 1             | LITD/14/13926          | Information Technology - Adequacy of Organizational Data Governance and Management Practices | 14 Oct 2023                   |

The comments received are given in Annex 4 (Page 23-38).

**The panel may informed the status on comments disposition and decide further course of action.**

### **ITEM 3 STATUS OF THINK TANK AND COMMUNICATION PANEL (Panel 14)**

**3.1** This Panel was constituted to rejuvenate and co-opt more members from Industry in Standardization work. The title and scope of the panel is given below:

LITD 14/Pane 14 : Think-Tank and Communication Panel

Scope : To carry out the following tasks:

- a) To identify Indian IT Industry needs
- b) To strengthen India's participation in JTC 1/SC 7 and SC 40
- c) Determination of Positions/Submissions of POV on Key Matters along with required stakeholders
- d) Avenues for creation of Indian Standards which can be potentially taken to ISO Forum
- e) Broad-basing Participation and inclusion of Key Standardization Bodies in LITD Committees including IEEE, PMI, INCOSE on an on-going basis
- f) Identification of Key Experts Participation in AGs, AHGs and WGs of JTC 1/SC 7
- g) Evaluate Mechanisms adopted by other NBs

The composition of the panel is given in Annex 1.

This panel organized an orientation session for new members in LITD 14 and also conducted a workshop in Agile manner to identify new proposals from India in JTC 1/SC 7. As a result of this workshop, following new work items were identified by panel member which are submitted as a proposal from India in JTC 1/SC 7.

- a) Creation for an adhoc on Green Software
- b) Creation of an adhoc on AI based Software development

There is also a proposal on Open-API and Interoperability Standards under consideration.

Convener is requested to brief the committee on the proposal from India in SC 7.

### **ITEM 4 ACTIVITIES OF PANELS OF LITD 14 VIS-À-VIS PLENARY MEETINGS OF SC 7 and SC 40**

**4.1** Following LITD 14 Panel Conveners are requested to brief the committee about the discussions of the corresponding SC 7 WGs.

| <b>Sl No.</b> | <b>New Panel No.</b> | <b>Title</b>  | <b>Convener</b>          |
|---------------|----------------------|---|--------------------------|
| 1             | LITD14/Panel 1       | System software documentation                             | Ms. Usha Mohan           |
| 2             | LITD14/ Panel 2      | Tools and Environment                                     | Dr Sridhar Chimalakonda  |
| 3             | LITD14/ Panel 3      | Evaluation and Metrics of Software Products and Processes | Mr. Vijay Krishnamoorthy |
| 4             | LITD14/ Panel 4      | Life cycle management                                     | Ms. Nayana Pandit        |
| 5             | LITD14/ Panel 5      | Software Asset Management                                 | Mr. Ramesh Jain          |

|    |                  |                              |                           |
|----|------------------|------------------------------|---------------------------|
| 6  | LITD14/ Panel 6  | Architecture                 | Dr Anand Kumar            |
| 7  | LITD14/ Panel 7  | IT Governance                | Mr. Sanjiv Kumar Agarwala |
| 8  | LITD14/ Panel 8  | IT Service Management        | Ms. Mitta Rout            |
| 9  | LITD14/ Panel 9  | ITeS-BPO                     | Mr. Sridhar Sukumar       |
| 10 | LITD14/ Panel 10 | Agile                        | Ms. Gayathri Ekambaram    |
| 11 | LITD14/ Panel 11 | Future Watch Panel           | Dr. Sundeep Oberoi        |
| 12 | LITD14/ Panel 12 | DevOps                       | Ms Sharmila Mookherjee    |
| 13 | LITD14/ Panel 13 | Data Management Panel        | Dr Sundeep Oberoi         |
| 14 | LITD14/ Panel 14 | Think-Tank and Communication | Ms. Nayana Pandit         |

In addition, following experts have been nominated to review the following work

- 15. JTC 1/SC 7/WG 10 Process Assessment – Mr Anirban Bhattacharya, TCS
- 16. JTC 1/SC 7/WG 26 Software Testing – Ms Mary Parveena, TCS

The conveners may brief the work of their panels.

#### **ITEM 5 PRESENT POSITION OF WORK OF LITD 14**

- 5.1** The present position of work of LITD 14 is given in **Annex 3 (Page 17-22)**. In accordance with BIS procedure, Indian Standards which are in existence for more than 3 years are to be reviewed for reaffirmation/revision/withdrawal.

**The Committee may consider.**

#### **ITEM 6 COMPOSITION OF LITD 14**

- 5 The present composition of Software and Systems Engineering Sectional Committee, LITD 14 and its Panels is given in **Annex 1(Page 7-13)**. The consolidated list of Indian experts nominated in JTC 1/SC 7 and SC 40 is mentioned at **Annex 2(Page 14-16)**.

**The committee members may let us know if there are any changes in the composition.**

#### **ITEM 7 INTERNATIONAL WORK**

- 7.1** A List of standards published by ISO/IEC/JTC 1/SC 7 and SC 40 are mentioned on the given link:

**JTC 1/SC 7:** <https://www.iso.org/committee/45086/x/catalogue/p/1/u/0/w/0/d/0>

**JTC 1/SC 40:** <https://www.iso.org/committee/5013818/x/catalogue/p/1/u/0/w/0/d/0>

The Panel conveners were requested to identify the important standard for adoption as Indian standard. Some of the relevant standards which may be considered for adoption are given below:

**The Committee may consider this and identify the other International Standards to be adopted as Indian Standards.**

## 7.2 NEXT PLENARY/INTERIM MEETINGS OF JTC 1/SC 7 and SC 40

The next Interim meetings of SC 7 and SC 40 are scheduled as per the details given below:

| Sl No.   | Meeting                   | Dates  | Place          |
|----------|---------------------------|--|----------------|
| 1        | ISO/IEC JTC 1/SC 40/WG 2  | 15 Nov 2023 02:30 to 05:29 IST                 | Virtual        |
| 2        | ISO/IEC JTC 1/SC 40/WG 2  | 16 Nov 2023 18:30 to 21:30 IST                 | Virtual        |
| 3        | ISO/IEC JTC 1/SC 40/WG 2  | 21 Nov 2023 10:30 to 13:30 IST                 | Virtual        |
| 4        | ISO/IEC JTC 1/SC 40/CAG 1 | 22 Nov 2023 18:30 to 20:30 IST                 | Virtual        |
| <b>5</b> | <b>ISO/IEC JTC 1/SC 7</b> | <b>11-15 Dec 2023</b>                          | <b>Virtual</b> |
| 6        | ISO/IEC JTC 1/SC 7/WG 19  | 13 Nov 2023 10:30 IST to 16 Nov 2023 10:29 IST | Virtual        |
| 7        | ISO/IEC JTC 1/SC 7/WG 21  | 15 Nov 2023 12:30 IST to 17 Nov 2023 12:29 IST | Hybrid         |
| 8        | ISO/IEC JTC 1/SC 7/WG 30  | 20 Nov 2023 00:00 IST to 21 Nov 2023 23:59 IST | Virtual        |
| 9        | ISO/IEC JTC 1/SC 7/WG 24  | 20 Nov 2023 10:30 IST to 24 Nov 2023 10:29 IST | Virtual        |
| 10       | ISO/IEC JTC 1/SC 7/WG 20  | 21 Nov 2023 20:30 IST to 29 Nov 2023 20:29 IST | Virtual        |
| 11       | ISO/IEC JTC 1/SC 7/WG 7   | 27 Nov 2023 11:30 IST to 01 Dec 2023 11:29 IST | Virtual        |
| 12       | ISO/IEC JTC 1/SC 7/WG 29  | 28 Nov 2023 17:30 IST to 28 Nov 2023 19:30 IST | Virtual        |

Following Indian delegates are expected to attend this meeting:  
JTC 1/SC 7 ‘Software and System Engineering’ Interim meetings

- a. Dr Sundeep Oberoi, Individual Capacity - SC 7 Chair
- b. Sh Anupam Agrawal, TCS - SC 7/AG 3 Convener
- c. Ms Nayana Pandit, TCS - SC 7 Plenary, SC 7/WG 7 - Head of the Delegation
- d. Ms Reena Garg, BIS - SC 7 Committee Manager
- e. Sh Hrishikesh Karekar, Capgemini - SC 7/WG 7 and WG 10
- f. Dr Anand Kumar, TCS - SC 7/WG 7., 29 and 42
- g. Sh Ashish Tiwari, BIS - SC 7 Committee Manager Support
- h. Ms Gayathri, TCS – SC 7/WG 29

JTC 1/SC 40 ‘IT service management and IT Governance’

- a) Sh Sanjiv Agarwala, Oxygen Consulting – HOD
- b) Dr Gargi Keeni, Individual Capacity
- c) Sh Kulpreet Nanda, Capgemini (Virtually) – SC 40/WG 2
- d) Ms Devi Nair, TCS (Virtually) – SC 40/WG 2

### ITEM 8 INFORMATION ON E-SALE OF STANDARDS BY BIS

8.1 Bureau of Indian Standards, the National Standards Body of India has published more than 20000 Indian Standards. Indigenous standards are available without fee and other standards are available for sale. Standards are available on BIS sales portal <https://www.standardsbis.in>.

### THE COMMITTEE MAY NOTE

## **ITEM 9 R&D PROJECTS FROM BIS**

**9.1** Following R&D projects were discussed during the last LITD 14 meeting:

- a) Data Management Practices at Panchayat Level in State of West Bengal
- b) Generative Artificial Intelligence for Software Engineering - A Systematic Literature Review of Approaches and Tools

Based on the discussion during the meeting, the revised text is awaited from the members.

**The committee may discuss.**

## **ITEM 10 NATIONAL INSTITUTE FOR TRAINING IN STANDARDISATION (NITS)**

National Institute of Training for Standardization (NITS) has been set up by BIS with world class facilities to impart training on various aspects leading to standardization, quality and other management systems, consumer protection, public service delivery, etc. The training calendar for the current year is available on BIS web site <https://www.bis.gov.in>. The organizations willing to depute their personnel for training may kindly go through the appropriate programme and get them registered.

### **THE COMMITTEE MAY NOTE**

## **ITEM 11 MANAKONLINE**

BIS has recently migrated its activities into an online collaboration tool. Three portals – the Standardization, Conformity Assessment and Training Portals of e-BIS can be accessed through [www.manakonline.in](http://www.manakonline.in). BIS committee related work like, meeting notice, issuing agenda, minutes, P-draft, WC draft etc. is being done through the Standardization portal.

### **THE COMMITTEE MAY NOTE**

## **ITEM 12 PROCESS REFORMS IN STANDARDIZATION ACTIVITY OF BIS**

Member Secretary will be giving a presentation on the Process Reforms in Standardization Activity of BIS to the committee.

- Rolling Action plan for the year 2023-24
- Annual calendar of LITD 14 meetings
- Research projects to be taken up for inclusion of empirical data and insights
- Closer examination of the new work item proposals received from ISO/IEC
- Measures to ensure effective participation by the Indian experts at ISO/IEC levels
- National and International events to be participated

- Scientific journals and periodicals to be subscribed
- Creation of pool of experts

**ITEM 13      DATE AND PLACE FOR THE NEXT MEETING**

**ITEM 14      ANY OTHER BUSINESS**

**Annex 1**  
*(Item 7.1)*

**COMPOSITION OF LITD 14 SOFTWARE AND SYSTEMS ENGINEERING**

**1 In Individual Capacity**

Shri Sundeep Oberoi Chairperson

**2 Accenture**

Shri Sridhar Sukumar Principal

**3 BlueKei Solutions Private Limited**

Dr Deva Henry Representative

Smt Stueti Gupta Representative

**4 Capgemini Technologies**

Smt Sonali Khopkar Principal

Shri Ajay Shastry Alternate

**5 Centre for Development of Advanced Computing**

Shri Jasjit Singh Principal

Shri Sanjay Wandhekar Alternate

Shri Praveen K. Srivastava Alternate

**6 Centre for Development of Telematics(C-DOT)**

Smt. Manisha Litoria Principal

Shri Umakanth Alternate

Shri Vinod Kumar Gupta Alternate

**7 Indian Institute of Technology Tirupati, Tirupati**

Dr Sridhar Chimalakonda Principal

**8 Ministry of Communication and Information Technology**

Shri Manoj kumar Saxena Alternate

**9 National Association of Software and Service Companies (NASSCOM)**

Shri K.S. Viswanathan Principal

Shri K.Purushothaman Alternate

**10 National Informatics Centre (NIC)**



|           |  |           |
|-----------|--|-----------|
|           | Shri G. Mayil Muthu Kumaran  | Principal |
|           | Smt Pooja Singh  | Alternate |
| <b>11</b> | <b>Standardization Testing and Quality Certification (STQC)</b>      |           |
|           | Shri Sanjeev Kumar   | Principal |
|           | Shri Nitish Kumar  | Alternate |
|           | Shri H. Roy  | Alternate |
| <b>12</b> | <b>Tata Consultancy Services Limited</b>                             |           |
|           | Shri Anupam Agrawal  | Alternate |
|           | Smt Nayana Pandit  | Principal |
| <b>13</b> | <b>The Institution of Electronics and Telecommunication Engineer</b> |           |
|           | Prof (Col) S L Kapoor (Retd)   | Principal |
|           | Shri R D Kharadar  | Alternate |
|           | Prof Nilesh N Kasat  | Alternate |
| <b>14</b> | <b>In Personal Capacity</b>  |           |
|           | Dr Jayakumar   |           |
|           | Dr Gargi Keeni   |           |
|           | Smt Usha Mohan   |           |
| <b>15</b> | <b>Cognizant technologies Ltd</b>                                    | Principal |
|           | Sh Amit Baranwal   |           |

**Composition of Panels under LITD 14**

| <b>LITD 14 : P1 - System software documentation Panel</b>                             |                                    |                      |                                 |
|---|------------------------------------|----------------------|---------------------------------|
| <b>S.No.</b>  | <b>Member Name</b>                 | <b>Organization</b>  | <b>Member Email</b>             |
| 1   | Ms Usha Mohan (Convenor)           | Individual Capacity  | ushamohan@gmail.com             |
| 2   | Mr. Mallilarjun Kandkuru           | KPMG                 | mkandkuru@kpmg.com              |
| <b>LITD 14 : P2 - Tools and Environment Panel</b>                                     |                                    |                      |                                 |
| <b>S.No.</b>  | <b>Member Name</b>                 | <b>Organization</b>  | <b>Member Email</b>             |
| 1   | Dr Sridhar Chimalakonda (Convenor) | IIT , Tirupati       | ch@iittp.ac.in                  |
| 2   | Mr. Vinod Kumar Gupta              | CDOT                 | vkgupta@cdot.in                 |
| 3   | Ms Sailaja Parthasarathy           | Intel                | sailaja.parthasarathy@intel.com |
| 4   | Vijay Krishnamoorthy (Convener)    | TCS                  | vijay.krishnamoorthy@tcs.com    |
| 5   | Ms. Shital Engineer                | TCS                  | shital.engineer@tcs.com         |
| <b>LITD 14 : P3 - Evaluation and Metrics of Software Products and Processes Panel</b> |                                    |                      |                                 |
| <b>S.No.</b>  | <b>Member Name</b>                 | <b>Organization</b>  | <b>Member Email</b>             |
| 1   | Vijay Krishnamoorthy (Convener)    | TCS                  | vijay.krishnamoorthy@tcs.com    |
| 2   | Natarajan Swaminathan              | TCS                  | natarajan.Swaminathan@tcs.com   |
| 3   | Dr. Anand Kumar                    | TCS                  | anand.ar@tcs.com                |
| 4   | Shri Nikhil Zope                   | TCS                  | nikhil.zope@tcs.com             |
| 5   | Dr Jayakumar                       | In Personal Capacity | jayakumar@amitysoft.com         |
| <b>LITD 14 : P4 - Life Cycle Management Panel</b>                                     |                                    |                      |                                 |
| <b>S.No.</b>  | <b>Member Name</b>                 | <b>Organization</b>  | <b>Member Email</b>             |
| 1   | Ms Nayana Pandit (Convenor)        | TCS                  | nayana.pandit@tcs.com           |
| 2   | Ms Pooja Singh                     | NIC                  | singhpooja@nic.in               |
| 3   | Natarajan Swaminathan              | TCS                  | natarajan.Swaminathan@tcs.com   |
| <b>LITD 14 : P5 - Software Asset Management Process Panel</b>                         |                                    |                      |                                 |
| <b>S.No.</b>  | <b>Member Name</b>                 | <b>Organization</b>  | <b>Member Email</b>             |
| 1   | Mr. Ramesh Jain (Convenor)         | Paras Training       | ramesh@paras-training.com       |
| 2   | Abhilash Varghese                  | In Personal Capacity | abhilashvarg@yahoo.co.in        |
| 3   | Mr .Supratik Gupta                 | In Personal Capacity | supratikgupta@icloud.com        |
| 4   | Mr. Ashwath Patil                  | In Personal Capacity | ashwath.patil@gmail.com         |
| 5   | Mr. Ritesh Dhingra                 | In Personal Capacity | riteshdingra@hotmail.com        |
| 6   | Shri. Kishore Gopinath             | In Personal Capacity | kishoregopinath@gmail.com       |
| 7   | Shri. P Saravanan                  | In Personal Capacity | saravanan.palani@aol.com        |
| 8   | Mr. Sunil Reddy                    | In Personal Capacity | sunilreddy.d@gmail.com          |

|  |                                     |  |                                |
|--|-------------------------------------|--|--------------------------------|
| 9  | Sh. Onkar Adwal                     | In Personal Capacity                                   | omkaradval@gmail.com           |
| <b>LITD 14 : P6 - Architecture Panel</b>                   |                                     |  |                                |
| <b>S.No.</b>   | <b>Member Name</b>                  | <b>Organization</b>                                    | <b>Member Email</b>            |
| 1  | Dr. Anand Kumar<br>(Convenor)       | TCS  | anand.ar@tcs.com               |
| 2  | Mr. Vinod Kumar Gupta               | CDOT   | vk Gupta@cdot.in               |
| 3  | Dr Sridhar Chimalakonda             | IIT , Tirupati   | ch@iittp.ac.in                 |
| 4  | Narang N Kishore                    | Narnix   | kishor@narnix.com              |
| 5  | Natarajan Swaminathan               | TCS  | natarajan.Swaminathan@tcs.com  |
| 6  | Mr. Navdeep Agarwal                 | TCS  | navigupta@gmail.com            |
| 7  | Mr. Padmavathy Ramesh               | TCS  | padma.r@tcs.com                |
| 8  | Mr. JVRS Prasad                     | TCS  | jammalamadaka.prasad@tcs.com   |
| <b>LITD 14 : P7 - IT Governance Panel</b>                  |                                     |  |                                |
| <b>S.No.</b>   | <b>Member Name</b>                  | <b>Organization</b>                                    | <b>Member Email</b>            |
| 1  | Sanjiv Kumar Agarwala<br>(Convenor) | Oxygen Consulting<br>Services Private<br>Limited, Pune | ska262001@yahoo.co.in          |
| 2  | Gargi Keeni                         | In Personal Capacity                                   | gargi@keenis.com               |
| <b>LITD 14 : P8 - IT Services Management Panel</b>         |                                     |  |                                |
| <b>S.No.</b>   | <b>Member Name</b>                  | <b>Organization</b>                                    | <b>Member Email</b>            |
| 1  | Smt Mitta Rout<br>(Convenor)        | Individual Capacity                                    | rout.mitta@gmail.com           |
| 2  | Ms Sonali Khopkar                   | Capgemini  | sonali.khopkar@capgemini.com   |
| 3  | Ajay Shastry                        | Capgemini  | ajay.shastry@capgemini.com     |
| 4  | Mr. Kulpreet nanda                  | Capgemini  | kulpreet.nanda@capgemini.com   |
| 5  | Ms. Leena Sagar                     | Capgemini  | leena.sagar@capgemini.com      |
| 6  | Mr. Vishnu Varthanan                | Capgemini  | vishnu.varthanan@capgemini.com |
| 7  | Mr. M V Padmanabhayya               | STQC   | mvp@stqc.gov.in                |
| 8  | Mr. Sandeep Khopkar                 | TCS  | Sandeep.Khopkar@tcs.com        |
| 9  | Mr. Devi Muraleedharan Nair         | TCS  | d.nair1@tcs.com                |
| 10   | Mr. Amit Shah                       | Wipro, Bengaluru                                       | amit.shah@wipro.com            |
| 11   | Gargi Keeni                         | In Personal Capacity                                   | gargi@keenis.com               |
| 12   | Abhilash Varghese                   | In Personal Capacity                                   | abhilashvarg@yahoo.co.in       |
| 13   | Ms. Sujatha Kumaraswamy             | In Personal Capacity                                   | sujatha_kumaraswamy@yahoo.com  |
| 14   | Mr. Sumit Jha                       | In Personal Capacity                                   | sumitkjha@gmail.com            |
| <b>LITD 14 : P9 - IT Enabled Services/ITeS (BPO) Panel</b> |                                     |  |                                |
| <b>S.No.</b>   | <b>Member Name</b>                  | <b>Organization</b>                                    | <b>Member Email</b>            |
| 1  | Shri Sridhar Sukumar<br>(Convenor)  | In Personal Capacity                                   | sridhar.sukumar@gmail.com      |
| 2  | Shri Ajith Thomas                   | TCS  | ajith.thomas@tcs.com           |
| 3  | Mrs. Chitra Natarajan               | TCS  | chitra.natarajan@tcs.com       |

|  |                                      |                      |                                       |
|--|--------------------------------------|----------------------|---------------------------------------|
| 4  | Mr Sougata Bhattacharya              | TCS                  | sougata.b@tcs.com                     |
| 5  | Ms Varsha Suresh                     | Wipro, Bengaluru     | varsha.suresh@wipro.com               |
| 6  | Mr. Ravi Veeraraghavan               | In Personal Capacity | 9540ravi@icmim.in                     |
| <b>LITD 14 : P10 - Agile Practices Panel</b> |                                      |                      |                                       |
| <b>S.No.</b>                                 | <b>Member Name</b>                   | <b>Organization</b>  | <b>Member Email</b>                   |
| 1  | Ms. Gayathri Ekambaram<br>(Convenor) | TCS                  | gayathri.e@tcs.com                    |
| 2  | Shri Kulbir Raina                    | Capgemini            | kulbir.raina@capgemini.com            |
| 3  | Mr. Vinod Kumar Gupta                | CDOT                 | vk Gupta@cdot.in                      |
| 4  | Dr Sridhar Chimalakonda              | IIT , Tirupati       | ch@iittp.ac.in                        |
| 5  | Anupam Agrawal                       | TCS                  | Anupam.Agrawal@tcs.com                |
| 6  | Dr. Anand Kumar                      | TCS                  | anand.ar@tcs.com                      |
| 7  | Ms Nayana Pandit                     | TCS                  | nayana.pandit@tcs.com                 |
| 8  | Vijay Krishnamoorthy<br>(Convener)   | TCS                  | vijay.krishnamoorthy@tcs.com          |
| 9  | Mr. Jaisankar Ts                     | TCS                  | jaisankar.ts@tcs.com                  |
| 10   | Ms. Sushanta Sinha                   | TCS                  | sushanta.sinha@tcs.com                |
| 11   | Mr. Manikandan<br>Balasubramanian    | TCS                  | manikandan.b@tcs.com                  |
| 12   | Mr. Ashwani Sharma                   | TCS                  | ashwanikumar.sharma@tcs.com           |
| 13   | Ms. Vasanthapriya<br>Mohankumar      | TCS                  | vasanthapriya.mohankumar@digitate.com |
| 14   | Mr. Dinesh Mohata                    | TCS                  | d.mohata@tcs.com                      |
| 15   | Mr. Gorakshnath Thorat               | TCS                  | gorakshnath.thorat@tcs.com            |
| 16   | Ms. Sunanda Jain                     | TCS                  | Sunanda.Jain@tcs.com                  |
| 17   | Mr. Prabhakaran Sampath              | TCS                  | Prabhakaran.sampath@tcs.com           |
| 18   | Mr. Vivek Thatte                     | TCS                  | vivek.thatte@tcs.com                  |
| 19   | Mr. Rajesh Rajagopalan               | TCS                  | rajesh.rajagopalan@tcs.com            |
| 20   | Mr. Venkata Kotta                    | TCS                  | venkata.kotta@tcs.com                 |
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**Annex 2**  
( Item 7.1)

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| JTC 1/SC 7/WG 4 Tools and Environment   | Dr Sridhar Chimalakonda, IIT Tirupati<br>Mr Vijay Krishnamoorthy, TCS<br>Ms.Shital Engineer, TCS   |
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|   | Mr Anand S.R<br>Mr Sumit Jha , Individual Capacity<br>Mr Supratik Gupta , In Personal Capacity   |
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| JTC 1/SC 7/WG 26 Software testing                   | Mr Deepu Chandra, LDRA<br>Dr. Gargi Keeni, Individual capacity<br>Rajesh Punjabi, TCS<br>Mr G. Mayil Muthu Kumaran , NIC<br>Ms Mary Praveena , TCS   |
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| JTC 1/SC 7/WG 30 Systems Resilience                 | Ms Nayana Pandit, TCS<br>Ms Gayathri Ekambaram, TCS<br>Mr Hrishikesh Karekar, Capgemini  |
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**Annex 3**  
*(Item 6.1)*

**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 WITH ISO/IEC/JTC 1 SUBCOMMITTEES**

ISO/IEC/JTC1/SC 7 Software and System Engineering (P)

ISO/IEC/JTC1/SC 40 IT Service Management and IT Governance (P)

| <b>Sl. No.</b> | <b>IS No.</b>            | <b>TITLE</b>   |
|----------------|--------------------------|--|
| 1              | IS 11289 : 2023          | Information technology Measurement and rating of performance of computer-based software systems                              |
|                | ISO/IEC 14756 : 1999     |  |
|                | ISO/IEC 14756 : 1999     |  |
| 2              | IS 11291 (Part 1) : 2023 | Software and systems engineering Software testing Part 1: General concepts   |
|                | ISO/IEC 29119-1 : 2022   |  |
|                | ISO/IEC 29119-1 : 2022   |  |
| 3              | IS 11291 (Part 2) : 2023 | Software and systems engineering Software testing Part 2: Test processes   |
|                | ISO/IEC 29119-2 : 2021   |  |
|                | ISO/IEC 29119-2 : 2021   |  |
| 4              | IS 11291 (Part 3) : 2023 | Software and systems engineering Software testing Part 3: Test documentation   |
|                | ISO/IEC 29119-3 : 2021   |  |
|                | ISO/IEC 29119-3 : 2021   |  |
| 5              | IS 11291 (Part 4) : 2023 | Software and systems engineering Software testing Part 4: Test techniques  |
|                | ISO/IEC 29119-4 : 2021   |  |
|                | ISO/IEC 29119-4 : 2021   |  |
| 6              | IS 12372 : 1987          | Presentation of single - Hit decision tABles   |
|                | ISO 5806: 1987[E]        |  |
| 7              | IS 12373 (Part 1) : 2018 | Information technology - Open systems interconnection - Basic reference model: Part 1 the basic model (First Revision)       |
|                | ISO 7498-1984[E]         |  |
| 8              | IS 12373 (Part 2) : 1992 | Basic reference model of open systems interconnection for information processing systems: Part 2 Security architecture       |
|                | ISO 7498-2               |  |
| 9              | IS 12373 (Part 3) : 2018 | Information technology - Open systems interconnection - Basic reference model: Part 3 naming and addressing (First Revision) |
|                | ISO/IEC 7498-3 : 199     |  |
|                | ISO/IEC 7498-3 : 199     |  |
| 10             | IS 12373 (Part 4) : 1993 | Basic reference model of open systems interconnection for information processing systems: Part 4 management framework        |
|                | ISO/IEC 7498-4           |  |
| 11             | IS 13394 : 2021          | Systems and software engineering Requirements for designers  |

|    |  |   |
|----|--|---|
|    | ISO/IEC 26514 : 2008   | and developers of user documentation(First Revision)  |
| 12 | IS 13587 : 1992<br>ISO 8790  | Computer system configuration diagram symbols and conventions for information processing systems  |
| 13 | IS 13615 : 2020<br>ISO/IEC 15953 : 1999<br>ISO/IEC 15953 : 1999                    | Information Technology - Open Systems Interconnection - Service Definition for the Application Service Object Association Control Service Element ( First Revision )                            |
| 14 | IS 13672 : 2018<br>ISO/IEC 9545 : 1994   | Information technology - Open systems interconnection - Application layer structure (First Revision)  |
| 15 | IS 13675 (Part 1/Sec 1) : 1993<br>ISO/IEC 13712-1 : 1995                           | Remote operations in text communication for information processing systems: Part 1 model, notation and service definition   |
| 16 | IS 13675 (Part 1) : 2023<br>ISO/IEC 13712-1 : 1995<br>ISO/IEC 13712-1 : 1995       | Information Technology Remote Operations Part 1 Section 1 Concepts Model and Notation   |
| 17 | IS 13675 (Part 1/Sec 2) : 2023<br>ISO/IEC 13712-2 : 1995<br>ISO/IEC 13712-2 : 1995 | Information Technology Remote Operations: OSI Realizations Part 1 Section 2 Remote Operations Service Element (ROSE) Service Definition   |
| 18 | IS 13675 (Part 2) : 1993<br>ISO/IEC 13712-3 : 1995<br>ISO/IEC 13712-3 : 1995       | Remote operations in text communication for information processing systems: Part 2 protocol specification   |
| 19 | IS 13675 (Part 2) : 2022<br>ISO/IEC 13712-3 : 1995                                 | Information technology -Remote Operations: OSI realizations- Part 2 Remote Operations service Element (ROSE) Protocol specification   |
| 20 | IS 13706 : 2020<br>ISO/IEC 15954 : 1999<br>ISO/IEC 15954 : 1999                    | Information Technology - Open Systems Interconnection - Connection-mode Protocol for the Application Service Object Association Control Service Element ( First Revision )                      |
| 21 | IS 13706 (Part 2) : 2016<br>ISO/IEC 8650-2 : 1997<br>ISO/IEC 8650-2 : 1997         | Information technology - Open systems interconnection - Protocol specification for the association control service element: protocol implementation conformance statement (PICS) performa       |
| 22 | IS 13707 (Part 1) : 1993<br>ISO/IEC 9066-1<br>ISO/IEC 9066-1                       | ReliABLE transfer in text communication for information processing systems: Part 1 model and service definition   |
| 23 | IS 13707 (Part 2) : 1993<br>ISO/IEC 9066-2<br>ISO/IEC 9066-2                       | ReliABLE transfer in text communication for information processing systems: Part 2 protocol specification   |
| 24 | IS 14639 : 2021<br>ISO/IEC 25051 : 2014<br>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 |
| 25 | IS 14653 : 2014<br>ISO/IEC 14102 : 2008  | Information technology - Guideline for the evaluation and selection of case tools (First Revision)  |
| 26 | IS 16124 : 2020<br>ISO/IEC 12207:2017  | Systems and Software Engineering - Software Life Cycle Processes ( First Revision )   |

|    |                                |  |
|----|--------------------------------|--|
| 27 | IS 16417 : 2015                | Software engineering - Software product quality requirements and evaluation (Square) - Planning and management   |
|    | ISO/IEC 25001:2014             |  |
|    | ISO/IEC 25001:2014             |  |
| 28 | IS 16419 (Part 1) : 2020       | Information Technology " IT Asset Management Part 1 IT Asset Management Systems - Requirements ( First Revision )                                      |
|    | 19770-1 : 2017                 |  |
| 29 | IS 16419 (Part 2) : 2022       | Information technology Software asset management Part 2: Software identification tag   |
|    | ISOIEC 19770-2 : 2015          |  |
|    | ISOIEC 19770-2 : 2015          |  |
| 30 | IS 16419 (Part 3) : 2021       | Information technology IT asset management Part 3: Entitlement schema  |
|    | ISO/IEC 19770-3 : 2016         |  |
|    | ISO/IEC 19770-3 : 2016         |  |
| 31 | IS 16443 : 2016                | Systems and software engineering - Systems and software quality requirements and evaluation (Square) - System and software quality models              |
|    | ISO/IEC 25010:2011             |  |
| 32 | IS 16445 : 2016                | Software engineering - Software product quality requirements and evaluation (Square) - Data quality model  |
|    | ISO/IEC 25012 : 2008           |  |
| 33 | IS 16446 : 2021                | Systems and software engineering Systems and software Quality Requirements and Evaluation SQuaRE Quality measurement framework First Revision          |
|    | ISO/IEC 25020 : 2019           |  |
| 34 | IS 16447 : 2016                | Systems and software engineering - Systems and software quality requirements and evaluation (Square) - Quality measure elements                        |
|    | ISO/IEC 25021 : 2012           |  |
| 35 | IS 16448 : 2021                | Systems and software engineering " Systems and software quality requirements and evaluation (SQuaRE) " Quality requirements framework (First Revision) |
|    | ISO/IEC 25030 : 2019           |  |
| 36 | IS 16456 : 2016                | Software engineering - Software life cycle processes - Maintenance   |
|    | ISO/IEC 14764 : 2006           |  |
| 37 | IS 16457 : 2020                | Systems and Software Engineering - System Life Cycle Processes ( First Revision )  |
|    | ISOIECIEEE15288:2015           |  |
|    |                                |  |
| 38 | IS 16458 : 2023                | Systems and software engineering Life cycle processes Risk management  |
|    | ISO/IEC/IEEE 16085 : 2021      |  |
| 39 | IS 16845 : 2019                | Systems and software engineering - Systems and software quality requirements and evaluation (Square) - Guide to square                                 |
|    | ISO/IEC25000:2014              |  |
| 40 | IS 17041 : 2018                | Software Quality Engineering " Development Process " Software Development Management System ( SDMS ) " Requirements                                    |
| 41 | IS 17548 : 2021                | Software and Systems Engineering " Core Agile Practices  |
| 42 | IS 17743 (Part 1) : 2021       | Systems and software engineering Lifecycle profiles for Very Small Entities VSEs Part 1: Overview  |
|    | ISO/IEC 29110-1 : 2016         |  |
| 43 | IS 17743 (Part 2/Sec 1) : 2021 | Software Engineering Lifecycle profiles for Very Small Entities VSEs Part 2: Framework and taxonomy  |

|    |                                |  |
|----|--------------------------------|--|
|    | ISO/IEC 29110-2-1 : 2015       |  |
| 44 | IS/ISO/IEC 20000-1 : 2018      | Information Technology - Service Management Part 1 Service Management System Requirements ( Second Revision )  |
| 45 | IS/ISO/IEC 20000-2 : 2019      | Information technology - Service management - Part 2: Guidance on the application of service management systems (Second Revision)  |
|    | ISO/IEC 20000 (PART 2) : 2019  |  |
| 46 | IS/ISO/IEC 20000-3 : 2019      | Information technology - Service management - Part 3: Guidance on scope definition and applicability of ISO/IEC 20000-1 (First Revision)   |
|    | ISO/IEC 20000 (PART 3) : 2019  |  |
| 47 | IS/ISO/IEC/TR 20000-5 : 2013   | Information Technology - Service Management Part 5 Exemplar Implementation Plan for IS/ISO/IEC TR 20000-5  |
|    | ISO/IEC 20000-5:2013           |  |
| 48 | IS/ISO/IEC 20000-10 : 2018     | Information Technology Service Management Part 10 Concepts and Vocabulary (First Revision)   |
|    | ISO/IEC 20000 (PART 10) : 2018 |  |
| 49 | IS/ISO/IEC/TS 30103 : 2015     | Software and Systems Engineering - Lifecycle Processes - Framework for Product Quality Achievement   |
|    | ISO/IEC 30103:2015             |  |
| 50 | IS/ISO/IEC 30105-1 : 2016      | Information Technology - IT Enabled Services - Business Process outsourcing (ITES-BPO) Lifecycle Processes Part 1 Process Reference Model (PRM)                                      |
|    | ISO/IEC 30105-1 : 2016         |  |
| 51 | IS/ISO/IEC 30105-2 : 2016      | Information Technology - IT Enabled Services - Business Process Outsourcing (ITES - BPO) Lifecycle Process Part 2 Process Assessment Model (PAM)                                     |
|    | ISO/IEC 30105-2 : 2016         |  |
| 52 | IS/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) |
|    | ISO/IEC 30105-3 : 2016         |  |
| 53 | IS/ISO/IEC 30105-4 : 2016      | Information Technology - IT Enabled Services - Business Process Outsourcing (ITES-BPO) Lifecycle Processes Part 4 Terms and Concepts   |
|    | ISO/IEC 30105-4 : 2016         |  |
| 54 | IS/ISO/IEC 30105-5 : 2016      | Information Technology - IT Enabled Services Business Process Outsourcing (ITES - BPO) Lifecycle Processes Part 5 Guidelines   |
|    | ISO/IEC 30105-5 : 2016         |  |
| 55 | IS/ISO/IEC 30130 : 2016        | Software engineering Capabilities of software testing tools  |
|    | ISO/IEC 30130:2016             |  |
| 56 | IS/ISO/IEC/IEEE 42010 : 2011   | Systems and Software Engineering - Architecture Description  |
| 57 | IS/ISO/IEC/IEEE 42020 : 2019   | Software systems and enterprise Architecture processes   |
| 58 | IS/ISO/IEC/IEEE 42030 : 2019   | Software systems and enterprise Architecture evaluation framework  |

|                  |  |  |
|------------------|--|--|
| 59               | IS/ISO/IEC 90003 : 2018                    | Software engineering Guidelines for the application of ISO 9001:2008 to computer software  |
| <b>Sl. No.</b>   | <b>Doc No</b>                              | <b>TITLE</b>   |
| 1                | LITD 14 (19326)                            | Information Technology - Adequacy of Organizational Data Governance and Management Practices   |
| 2                | LITD 14 (21945) (ISO/IEC 25010)            | Systems and Software Engineering Systems and Software Quality Requirements and Evaluation Square System and Software Quality Models First Revision |
| 3                | LITD 14 (21946) (ISO/IEC 14764:2022)       | Software engineering - Software life cycle processes Maintenance First Revision  |
| 4                | LITD 14 (21947) (ISO/IEC 15288)            | Systems and software engineering System life cycle processes Second Revision   |
| 5                | LITD 14 (21948) (ISO/IEC TS 20000-5: 2022) | Information technology Service management Part 5 Implementation guidance for ISISOIEC 20000-1 First Revision                                       |
| 6                | LITD 14 (21949) (ISO/IEC/IEEE 42010: 2022) | Software systems and enterprise Architecture description First Revision  |
|                  | Product:                                   | 0  |
|                  | Code of Practices :                        | 8  |
|                  | Methods of Test :                          | 3  |
|                  | Terminology :                              | 5  |
|                  | Dimensions :                               | 0  |
|                  | System Standard :                          | 5  |
|                  | Safety Standard :                          | 0  |
|                  | Others :                                   | 27   |
|                  | Service Specification :                    | 3  |
|                  | Process Specification :                    | 5  |
|                  | Unclassified :                             | 1  |
| <b>WITHDRAWN</b> |  |  |
| <b>Sl. No.</b>   | <b>IS No. &amp; Year</b>                   | <b>TITLE</b>   |
| 6                | IS 13392 : 1992                            | Programme flow for processing sequential files in terms of record groups for information processing  |
|                  | ISO 6593                                   |  |
| 7                | IS 13553 : 1993                            | User documentation and cover information for consumer software packages for information processing systems   |
|                  | ISO 9127                                   |  |
| 8                | IS 13557 (Part 14) : 1993                  | Information processing systems - vocabulary Part 14 reliABility maintenance and availABILITY   |
|                  | ISO 2382-14                                |  |
| 9                | IS 13557 (Part 18) : 1999                  | Information processing systems - vocabulary Part 18 distributed data processing  |
|                  | ISO 2382-18                                |  |
| 10               | IS 14638 : 1998                            | Information technology - Software product evaluation - Quality characteristics and guidelines for their use  |
|                  | ISO/IEC 9126                               |  |

|    |                                 |   |
|----|---------------------------------|---|
| 11 | IS 14692 (Part 1) : 1999        | Information technology - vocabulary Part 1 fundamental terms  |
|    | ISO/IEC 2382-1                  |   |
| 12 | IS 1885 (Part 52/Sec 2) : 1980  | Electrotechnical vocabulary Part 52 data processing Sec 2 arithmetic and logic operations                         |
|    | ISO 2382-2                      |   |
| 13 | IS 1885 (Part 52/Sec 7) : 1980  | Electrotechnical vocabulary Part 52 data processing Sec 7 digital computer programming                            |
|    | ISO 2382-5                      |   |
| 14 | IS 1885 (Part 52/Sec 10) : 1980 | Electrotechnical vocabulary Part 52 data processing Sec 10 data communication                                     |
|    | ISO 2382-10                     |   |
| 15 | IS 1885 (Part 52/Sec 11) : 1981 | Electrotechnical vocabulary Part 52 data processing Sec 11 operating techniques and facilities                    |
|    | ISO 2382-10                     |   |
| 16 | IS 1885 (Part 52/Sec 13) : 1980 | Electrotechnical vocabulary Part 52 data processing Sec 13 analogue and hybrid computing                          |
|    | ISO 2382-19                     |   |
| 17 | IS 1885 (Part 52/Sec 14) : 1983 | Electrotechnical vocabulary Part 52 data processing Sec 14 computer graphics and computer micrographics           |
|    | ISO 2382-13                     |   |
| 18 | IS/ISO/IEC/TR 20000-4 : 2010    | Information Technology Service Management Part 4 Process Reference Model  |
|    | ISO/IEC 20000-4 : 2010          |   |
| 19 | IS/ISO/IEC/TR 20000-9 : 2015    | Information Technology Service Management Part 9 Guidance on the Application of ISO IEC 20000-1 to Cloud Services |
|    | ISO/IEC 20000 : Part 9 : 2015   |   |

## Annex 4

### Comments on LITD 14 (13926) WC Draft

#### Item 3.1

| Com<br>m | Basic Details  | Claus<br>e | Par<br>agr<br>aph<br>No. | Type<br>of<br>Com<br>ment | Comments/Suggestions along with<br>Justification for the Proposed<br>Change  | Proposed<br>Change/Modifi<br>ed Wordings   | Propo<br>sed<br>Comm<br>ent<br>Status | Remarks   |
|----------|--|------------|--------------------------|---------------------------|--|--|---------------------------------------|---|
| 1        | Name: G. Mayil Muthu Kumaran(stakeholder)<br><br>Organisation:<br>Email: muthu@nic.in<br>Mobile: 9810119461<br>Comment ID #: LITD_2023-10-117787 | 0.3        | 4                        | Editorial                 | Punctuation mark (.) is missing. 'The purpose of the standard is to define the core practices and processes which organizations must demonstrate in respect of data governance and management, as well as define the requirements and method of assessment to determine if those practices and processes being performed at a level that is defined to be adequate'<br><br>Comment: Suggestion to add the punctuations in the specified clauses.   | 'The purpose of the standard is to define the core practices and processes which organizations must demonstrate in respect of data governance and management, as well as define the requirements and method of assessment to determine if those practices and processes being performed at a level that is defined to be adequate (.)' | Rejected                              | No such punctuation issue found in the draft under circulation. |
| 2        | Name: G. Mayil Muthu Kumaran(stakeholder)<br><br>Organisation:<br>Email: muthu@nic.in<br>Mobile: 9810119461<br>Comment ID #: LITD_2023-10-117787 | 5          | 8                        | Editorial                 | Punctuation mark (.) is extra<br><br>'The objective of the practices in the Planning & Governance Practice group is to establish the over-arching data governance structure, governance strategy, policies & processes that are needed for the organization to achieve its objectives of efficient oversight of the usage of organizational data assets and the compliance with applicable regulations.'<br><br>Comment: Suggestion to remove extra punctuations in the specified clauses. | 'The objective of the practices in the Planning & Governance Practice group is to establish the over-arching data governance structure, governance strategy, policies & processes that are needed for the organization to  | Rejected                              | No such punctuation issue found in the draft under circulation. |



|   |  |       |    |           |   |   |          |   |
|---|--|-------|----|-----------|---|---|----------|---|
|   |  |       |    |           |   | achieve its objectives of efficient oversight of the usage of organizational data assets and the compliance with applicable regulations(.,)'  |          |   |
| 3 | Name: G. Mayil Muthu Kumaran(stakeholder)<br><br>Organisation:<br>Email: muthu@nic.in<br>Mobile: 9810119461<br>Comment ID #: LITD_2023-10-117787 | 6.5   | 10 | Editorial | Replace the Punctuation mark (.,) with comma (,).<br><br>'Document management entails capture, storage, retention and management of documents and include functions such as intake, drafting, versioning, collaboration, internal and external sharing, security, metadata, access rights, workflows, search, repository organization, archiving and retention policy management, along with reporting and auditing on these functions'.<br><br>Comment: Suggestion to replace the punctuations (.,) with (,) in the specified clauses. | Document management entails capture, storage, retention and management of documents and include functions such as intake, drafting, versioning, collaboration(.,) internal and external sharing, security, metadata, access rights, workflows, search, repository organization, archiving and retention policy management, along with reporting and auditing on these functions | Accepted | <b>Changes made in the document.</b>                            |
| 4 | Name: G. Mayil Muthu Kumaran(stakeholder)<br><br>Organisation:<br>Email: muthu@nic.in<br>Mobile: 9810119461<br>Comment ID #:                     | 6.5.1 | 11 | Editorial | Starting alphabet of 'timely' should be 'T'<br><br>'Deployed Document & Content Management Capability: timely availability of consistent and current Document & Content type resources across the organization'<br><br>Comment: Suggestion to replace the small ('t') with ('T').   | Deployed Document & Content Management Capability: <b>Timely</b> availability of consistent and current   | Rejected | No such punctuation issue found in the draft under circulation. |

|   |  |        |    |           |  |   |          |  |
|---|--|--------|----|-----------|--|---|----------|--|
|   | LITD_2023-10-117787  |        |    |           |  | Document & Content type resources across the organization.                    |          |  |
| 5 | Name: G. Mayil Muthu Kumaran(stakeholder)<br><br>Organisation:<br>Email: muthu@nic.in<br>Mobile: 9810119461<br>Comment ID #: LITD_2023-10-117787 | 8      | 13 | Editorial | Remove extra punctuation mark (.) in below sentence before word <group><br><br>'The Foundational Practice group can be considered as a pre-requisite (.) group.'<br><br>Comment: Suggestion to remove the extra punctuation (.) in the specified clauses.  | 'The Foundational Practice group can be considered as a pre-requisite group.' | Rejected | No such punctuation issue found in the draft under circulation.                            |
| 6 | Name: G. Mayil Muthu Kumaran(stakeholder)<br><br>Organisation:<br>Email: muthu@nic.in<br>Mobile: 9810119461<br>Comment ID #: LITD_2023-10-117787 | 2      | 5  | Editorial | In the reference section <b>ISO/IEC</b> numbers are incompletely mentioned with punctuation (:).<br><br><b>ISO/IEC 33001:</b><br><b>ISO/IEC 33002:</b><br><b>ISO/IEC 33003:</b><br><br><b>Comment: Remove the extra punctuations (:).</b>  | <b>ISO/IEC 33001</b><br><b>ISO/IEC 33002</b><br><b>ISO/IEC 33003</b>          | Rejected | The numbers have been moved to Annexure B as applicable.                                   |
| 8 | Name: G. Mayil Muthu Kumaran(stakeholder)<br><br>Organisation:<br>Email: muthu@nic.in<br>Mobile: 9810119461<br>Comment ID #: LITD_2023-10-117787 | Header | 3  | Editorial | <b>Data Mismatch</b> on the page 1 header section in ' <b>Doc: LITD 14 (19326)</b> ' while in header section of page 3 it is written ' <b>Doc: LITD 14 (19386)</b> '<br><br><b>Formate Mismatch On page 1</b><br><b>formate of text on header section is 'Doc: LITD 14 (19326) IS xxxxx : 2022' while on Page 3 formate is 'XXXXX:2022 Doc: LITD 14 (19386)' different</b> |   | Rejected | No such mismatch exists. No formate mismatch could be found.                               |
| 9 | Name: G. Mayil Muthu Kumaran(stakeholder)<br><br>Organisation:<br>Email: muthu@nic.in<br>Mobile: 9810119461<br>Comment ID #:                     | 3.1    | 5  | Editorial | <b>Uniformity in the text case is not observed.</b> In Sections 3.1 to 3.6 clause the starting alphabet is in Lower case while in sections 3.7 to 3.9 clause al letter starts in Upper case.<br>'3.1 process set of interrelated or interacting activities which transforms inputs into outputs  |   | Rejected | This is a Terminology Section. There are three terms defined here. All terms starting with |

|    |  |     |   |           |   |  |          |   |
|----|--|-----|---|-----------|---|--|----------|---|
|    | LITD_2023-10-117787  |     |   |           |   |  |          | capital letter  |
| 10 | Name: G. Mayil Muthu Kumaran(stakeholder)<br><br>Organisation:<br>Email: muthu@nic.in<br>Mobile: 9810119461<br>Comment ID #: LITD_2023-10-117787 | 3.2 | 5 | Editorial | 3.2 process attribute / process quality attribute measurable property of a process quality characteristic             |  | Rejected | This is a Terminology Section. There are three terms defined here. All terms starting with capital letter |
| 11 | Name: G. Mayil Muthu Kumaran(stakeholder)<br><br>Organisation:<br>Email: muthu@nic.in<br>Mobile: 9810119461<br>Comment ID #: LITD_2023-10-117787 | 3.3 | 5 | Editorial | 3.3 process attribute outcome observable result of achievement of a specified process attribute                       |  | Rejected | This is a Terminology Section. There are three terms defined here. All terms starting with capital letter |
| 12 | Name: G. Mayil Muthu Kumaran(stakeholder)<br><br>Organisation:<br>Email: muthu@nic.in<br>Mobile: 9810119461<br>Comment ID #: LITD_2023-10-117787 | 3.4 | 5 | Editorial | 3.4 process attribute rating judgement of the degree of achievement of the process attribute for the assessed process |  | Rejected | This is a Terminology Section. There are three terms defined here. All terms starting with capital letter |
| 13 | Name: G. Mayil Muthu Kumaran(stakeholder)<br><br>Organisation:<br>Email: muthu@nic.in<br>Mobile: 9810119461<br>Comment ID #: LITD_2023-10-       | 3.5 | 5 | Editorial | 3.5 process capability characterization of the ability of a process to meet current or projected business goals       |  | Rejected | This is a Terminology Section. There are three terms defined here. All terms starting with capital        |

|    |  |     |   |           |   |  |          |   |
|----|--|-----|---|-----------|---|--|----------|---|
|    | 117787   |     |   |           |   |  |          | letter  |
| 14 | Name: G. Mayil Muthu Kumaran(stakeholder)<br><br>Organisation:<br>Email: muthu@nic.in<br>Mobile: 9810119461<br>Comment ID #: LITD_2023-10-117787 | 3.6 | 5 | Editorial | 3.6 process capability level characterization of a process on an ordinal measurement scale of process capability  |  | Rejected | This is a Terminology Section. There are three terms defined here. All terms starting with capital letter |
| 15 | Name: G. Mayil Muthu Kumaran(stakeholder)<br><br>Organisation:<br>Email: muthu@nic.in<br>Mobile: 9810119461<br>Comment ID #: LITD_2023-10-117787 | 3.7 | 5 | Editorial | <b>3.7</b> Process capability Level 0: Incomplete process<br>The process is not implemented or fails to achieve its process purpose. At this level there is little or no evidence of any systematic achievement of the process purpose.   |  | Rejected | This is a Terminology Section. There are three terms defined here. All terms starting with capital letter |
| 16 | Name: G. Mayil Muthu Kumaran(stakeholder)<br><br>Organisation:<br>Email: muthu@nic.in<br>Mobile: 9810119461<br>Comment ID #: LITD_2023-10-117787 | 3.8 | 5 | Editorial | <b>3.8</b> Process capability Level 1: Performed process<br><b>The implemented process achieves its process purpose.</b>  |  | Rejected | This is a Terminology Section. There are three terms defined here. All terms starting with capital letter |
| 17 |  | 3.9 | 5 | Editorial | <b>3.9</b> Process capability Level 2: Managed process<br><br><b>The previously described Performed process is now implemented in a managed fashion (planned, monitored and adjusted) and its documented information are appropriately established, controlled and maintained.'</b> |  | Rejected | This is a Terminology Section. There are three terms defined here. All terms starting with                |

|    |  |       |      |           |   |  |            |  |
|----|--|-------|------|-----------|---|--|------------|--|
|    |  |       |      |           |   |  |            | capital letter   |
| 18 | Name: G. Mayil Muthu Kumaran(stakeholder)<br><br>Organisation:<br>Email: muthu@nic.in<br>Mobile: 9810119461<br>Comment ID #: LITD_2023-10-117787 | 4     | 7,11 | Technical | <p>Suggestion to add '<b>Operations</b>' in Data storage &amp; operations section to monitor the overall health of Data in an organization</p> <p>In the Data management practices framework, 'Data storage and operations' is observed while in explanation section 'operations' is missing. Suggestion to explain Data Analytics monitoring process in this section.</p> <p>Data Analytics is an emerging process that can augment data quality and data governance initiatives by providing a more complete picture of Data health in an organization demanding continuous monitoring of pipelines, profiling of data, reporting, predicting errors and pro-actively preventing them depending on the size of an organization.</p> <p><b>Comment:</b> Suggestion to Add Data Analytics in operations to monitor the overall health of Data in an organization.</p> | <p><b>Suggestion to Add below description in 'Operations' section:</b></p> <p><b>Data Analytics is an emerging process that can augment data quality and data governance initiatives by providing a more complete picture of Data health in an organization demanding continuous monitoring of pipelines, profiling of data, reporting, predicting errors and pro-actively preventing them depending on the size of an organization.</b></p> | To Discuss | Analytics is part of the Decision Management Practice. |
| 19 | Name: G. Mayil Muthu Kumaran(stakeholder)<br><br>Organisation:<br>Email: muthu@nic.in<br>Mobile: 9810119461<br>Comment ID #: LITD_2023-10-117787 | 7.3.1 | 12   | Technical | <p><b>Comment:</b> Suggestion to include in subclause of '<b>Outcomes of Data Confidentiality</b>' should include point regarding: Regular review policies on implemented encrypted solutions in the Enterprise to maintain Data Integrity by avoiding any new security breach.</p>   | <p>Suggestion to Add in subclause of <b>Outcomes of Data Confidentiality:</b></p> <p>iv) Policies on regular reviews of implemented encrypted solutions and Enterprise wide key management process to maintain Data Confidentiality by avoiding any new security breach.</p>   | To Discuss |  |

|    |   |       |    |           |  |   |            |                  |
|----|---|-------|----|-----------|--|---|------------|------------------|
| 20 | Name: G. Mayil Muthu Kumaran(stakeholder)<br><br>Organisation:<br>Email: muthu@nic.in<br>Mobile: 9810119461<br>Comment ID #:<br>LITD_2023-10-117787 | 7.4.1 | 13 | Technical | <b>Comment</b> : Suggestion to add <b>Authentication, Authorization and Data breach policies</b> in <b>Outcomes of Data Integrity Practice</b><br><br><b>Pro-active actions taken on an event of Data breach in order to maintain the integrity of data.</b>   | Suggestion to add <b>Authentication, Authorization and Data breach policies</b> in <b>Outcomes of Data Integrity Practice</b><br><br><b>iii) Pro-active actions to be taken in an event of Data breach to maintain the integrity of data.</b><br><br>iv) Authentication and Authorization policies to be implemented. | To Discuss |                  |
| 21 | Name: G. Mayil Muthu Kumaran(stakeholder)<br><br>Organisation:<br>Email: muthu@nic.in<br>Mobile: 9810119461<br>Comment ID #:<br>LITD_2023-10-117787 | 8.1.1 | 14 | General   | Suggestion to add ' <b>Data Catalogue</b> ' in 8.1.1 (i)<br><br>Comment : Apart from Business Glossary and Data Dictionary, suggestion to add Data catalogues which helps in organizing structured and unstructured data.  | Suggestion to rephrase the point (i) by adding " <b>Data catalogues</b> ' in 8.1.1 (i).<br>(i) Organizational capability in terms of Business Glossary / Data Dictionary/ Data Catalogue providing understanding on data attributes business terms and usage.   | Rejected   | Already included |
| 23 | Name: C.K.Varma(stakeholder)<br>Organisation:<br><br>Email: ck_varma@yahoo.co.in<br>Mobile: 9868603923  | Title | 1  | General   | The word "adequacy" doesn't seem appropriate to me. It should at best be Guidelines. It should also be decided whether it will serve as a guideline or Standard because the subject matter will undergo changes very fast as data science is evolving at a very fast pace and so also data governance needing thereby so many amendments if it is conceived as a Standard. The guideline may undergo a revision repeatedly within short intervals but only amendments can take place in a Standard which has a shelf life of 5 years at present as per BIS policy environment and keeping number of amendments is quite untidy along with a Standard not for BIS but for user organizations. |   | To Discuss |                  |

|    |  |                          |   |         |  |  |            |  |
|----|--|--------------------------|---|---------|--|--|------------|--|
| 24 | Name:<br>C.K.Varma(stakeholder)<br>Organisation:<br><br>Email:<br>ck_varma@yahoo.co.in<br>Mobile: 9868603923 | Fore word                | 4 | General | <p>What is data governance led organisational data management?</p> <p>It appears that a short cut is being adopted by combining the two different terms used in different contexts. If data governance is a policy document and data management is an execution document Therefore, there's always a debate whether data governance is a part of data management or vice versa? In that case data governance is a sub set of data management. In other words, data governance cannot lead the data management but at best can guide data management practices. Time to rethink about this aspect.</p> <p>In addition, there are many different structures of Organisations based on the core activities like making a product or providing services or both. There can be other types based on the way command/instruction is carried out. So, the Foreword of formulated Standard does not throw any light on different organisational structures and implementation of data governance into those. A generalised approach for so many different types of organisations may not be applicable and acceptable by different types of organisations.</p> |  | Rejected   | There were number of discussions in this respect in the initial meetings and the panel felt that the current method is the best way to move forward. |
| 25 | Name:<br>C.K.Varma(stakeholder)<br>Organisation:<br><br>Email:<br>ck_varma@yahoo.co.in<br>Mobile: 9868603923 | INTR<br>ODU<br>CTIO<br>N | 5 | General | <p>What is the purpose of keeping this Chapter when what has been stated here can be incorporated into the Foreword? Further, 0 numbering has been assigned to different sub chapters under this chapter which clearly indicates that it is not part of the document when it was first envisaged and is a supplementary addition.</p>  |  | To Discuss |  |

|    |  |   |   |         |  |  |            |  |
|----|--|---|---|---------|--|--|------------|--|
| 26 | Name:<br>C.K.Varma(stakeholder)<br>Organisation:<br><br>Email:<br>ck_varma@yahoo.co.in<br>Mobile: 9868603923 | 1 | 6 | General | The scope is too narrow. It should be wide enough to accommodate various organizational structures etc. Organization's type , size and nature put different demands on data governance and management , hence putting all under this Standard is not feasible. For instance, data size depends on the organization's size and accordingly the requirements of data governance change. Similarly, the nature of the organization and its activities play a dominant role in how the data is managed. Thus generalizations will lead to errors while going for execution.  |  | To Discuss |  |
| 27 | Name:<br>C.K.Varma(stakeholder)<br>Organisation:<br><br>Email:<br>ck_varma@yahoo.co.in<br>Mobile: 9868603923 | 3 | 6 | General | This section is too short. It is agreeable that user needs to search for vocabulary part in some other standard, but at least terms which are mostly used should be included so that user need not to drift away to different documents. A few of this inclusion could be data governance, data planning, data privacy, data integrity, metadata and so on. For instance, data governance can have different connotations depending upon the context. Similarly, data privacy can be a sub set of data integrity which in itself is a very wide term and can include data confidentiality as well. Again, data regulatory compliance can be a subject in itself in data governance but no one can appreciate it by the mere use of this term at some place in this document. |  | To Discuss |  |
| 28 | Name:<br>C.K.Varma(stakeholder)<br>Organisation:<br><br>Email:<br>ck_varma@yahoo.co.in<br>Mobile: 9868603923 | 4 | 5 | General | The hierarchical significance of the Practice Group will help tremendously to an organization. In Private/Governmental Organizations, if no hierarchy is detailed for data Governance, these practice Groups will not yield the desired results. Because everybody reports to someone and that someone is also responsible to  |  | To Discuss |  |



|    |   |     |   |         |   |  |            |                               |
|----|---|-----|---|---------|---|--|------------|-------------------------------|
|    |   |     |   |         | <p>some other one.</p> <p>For example, there is a data manager who has the functional authority in an organization and is reporting to functional head in any vertical. This post is parallel to line hierarchy handling the core functions. Since the functional head is responsible for policy formulation, budgeting and other important aspects and if data manager suggests some improvement in the name of data management, it can be opposed by the other groups in the name of data privacy, data confidentiality and so on. So, a clear-cut data governance/data management hierarchy should be envisaged or be talked about in this document. Merely forming groups will not be sufficient for handling data governance and its management. Same applies to Governmental Organizations as well. Minimum a tree chart will be helpful.</p> |  |            |                               |
| 29 | <p>Name:<br/>C.K.Varma(stakeholder)<br/>Organisation:</p> <p>Email:<br/>ck_varma@yahoo.co.in<br/>Mobile: 9868603923</p> | 4   | 5 | General | <p>Use of the word “oversight” in the 3rd line under para “5 Practice Group – Planning &amp; Governance” is giving a different and opposite meaning and should be replaced by a suitable and more appropriate word.</p> <p>Also delete “Practice - Data Governance” at the end of para which seems redundant.</p>   |  | Accepted   | Changes made in the document. |
| 30 | <p>Name:<br/>C.K.Varma(stakeholder)<br/>Organisation:</p> <p>Email:<br/>ck_varma@yahoo.co.in</p>                        | 5.1 | 8 | General | <p>An example below each sub point will provide more clarity and comprehension to what has been suggested under each system. This will also help identifying any overlapping of functions of different Practice Groups.</p> <p>It will also be appropriate if a simple suggestive tree diagram may be provided for each practice</p>  |  | To Discuss |                               |

|    |  |       |    |         |  |  |            |  |
|----|--|-------|----|---------|--|--|------------|--|
|    | Mobile:<br>986860392<br>3  |       |    |         | group for better clarity.  |  |            |  |
| 31 | Name:<br>C.K.Varma(stakeholder)<br>Organisation:<br><br>Email:<br>ck_varma@yahoo.co.in<br>Mobile: 9868603923 | 5.2   | 8  | General | Under this head in place of “longer time horizon” some quantitative figure can be substituted to give better edge to the data planners.  |  | To Discuss |  |
| 32 | Name:<br>C.K.Varma(stakeholder)<br>Organisation:<br><br>Email:<br>ck_varma@yahoo.co.in<br>Mobile: 9868603923 | 6     | 9  | General | The name of this practice group is long and complex. For better comprehension and remembrance, simple name may be thought of. In fact, it contains data processes and execution part of data science and accordingly a simpler and suggestive name can be considered.  |  | To Discuss |  |
| 33 | Name:<br>C.K.Varma(stakeholder)<br>Organisation:<br><br>Email:<br>ck_varma@yahoo.co.in<br>Mobile: 9868603923 | 6.1   | 9  | General | In most of the organisations, most of the decisions are not data driven. It is better to incorporate better practice so that decision management becomes data driven and more objective. This can be a game changer if decisions taken can be pre analysed for the objectives to be achieved before their actual implementation. |  | To Discuss |  |
| 34 | Name:<br>C.K.Varma(stakeholder)<br>Organisation:<br><br>Email:<br>ck_varma@yahoo.co.in<br>Mobile: 9868603923 | 6.2   | 9  | General | The description here is too bulky that enablers themselves may tangle. Idea is therefore to use lesser terms but to an effective pitch so that data architecture remains simple yet effective.   |  | To Discuss |  |
| 35 | Name:<br>C.K.Varma(stakeholder)<br>Organisation:<br><br>Email:   | 6.5.1 | 11 | General | How Point e) under this is part of this outcome? It appears a duplicity here because it is already part of 6.4.1 e).   |  | To Discuss |  |

|    |  |       |    |           |  |  |            |                               |
|----|--|-------|----|-----------|--|--|------------|-------------------------------|
|    | ck_varma@yahoo.co.in<br>Mobile: 9868603923   |       |    |           |  |  |            |                               |
| 36 | Name:<br>C.K.Varma(stakeholder)<br>Organisation:<br><br>Email:<br>ck_varma@yahoo.co.in<br>Mobile: 9868603923 | 6.6.1 | 12 | Editorial | Point d) under this is a summary of all above points and should be kept alone or be eliminated altogether. |  | Accepted   | Changes made in the document. |
| 37 | Name:<br>C.K.Varma(stakeholder)<br>Organisation:<br><br>Email:<br>ck_varma@yahoo.co.in<br>Mobile: 9868603923 | 7     | 12 | General   | The word Data Protection has been added here while it is not existing in Fig 1.                            |  | To Discuss |                               |

|    |  |       |    |           |   |  |            |                               |
|----|--|-------|----|-----------|---|--|------------|-------------------------------|
| 38 | Name:<br>C.K.Varma(stakeholder)<br>Organisation:<br><br>Email:<br>ck_varma@yahoo.co.in<br>Mobile: 9868603923 | 7.1   | 12 | General   | Is data classification really needed now in view of terming data as asset and also big data for the organization? This aspect needs to be explored fully to prevent unnecessary concentration of this aspect of data. Every part and every inch of data is important now and with the use of data cleaning the nuisance of unwanted data can be get rid of. |  | To Discuss |                               |
| 39 | Name:<br>C.K.Varma(stakeholder)<br>Organisation:<br><br>Email:<br>ck_varma@yahoo.co.in<br>Mobile: 9868603923 | 7.2.1 | 13 | General   | What is PII in b), c) and d)?   |  | To Discuss |                               |
| 40 | Name:<br>C.K.Varma(stakeholder)<br>Organisation:<br><br>Email:<br>ck_varma@yahoo.co.in<br>Mobile: 9868603923 | 7.4   | 13 | General   | An example has been given under this. Why the same pattern can not be followed under all other practices?   |  | To Discuss |                               |
| 41 | Name:<br>C.K.Varma(stakeholder)<br>Organisation:<br><br>Email:<br>ck_varma@yahoo.co.in<br>Mobile: 9868603923 | 7.4.1 | 14 | Editorial | What is “granularity for integrity protection” as mentioned in 7.4.1 a)? Needs to be defined. Similarly a standard for integrity protection as “Checksums” has been mentioned. If it is a general term should be defined properly or eliminated completely.   |  | Accepted   | Changes made in the document. |

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| 42 | Name:<br>C.K.Varma(stakeholder)<br>Organisation:<br><br>Email:<br>ck_varma@yahoo.co.in<br>Mobile: 9868603923 | 7.5.1 | 14 | General | Why f) can not be part of a)? Just think and if possible, make it part of a).   |  | To Discuss |  |
| 43 | Name:<br>C.K.Varma(stakeholder)<br>Organisation:<br><br>Email:<br>ck_varma@yahoo.co.in<br>Mobile: 9868603923 | 7.6   | 14 | General | The last line under this para is to be deleted, as it appears a typo error.   |  | To Discuss |  |
| 44 | Name:<br>C.K.Varma(stakeholder)<br>Organisation:<br><br>Email:<br>ck_varma@yahoo.co.in<br>Mobile: 9868603923 | 7.6.1 | 14 | General | Data regulatory compliance is done as per the standard practice of the bodies undertaking such compliance. Hence defining too many outcomes will create a problem to the implementation group. Hence to be kept minimum with the addition of “as per the standard practice of the third party carrying out the compliance”.   |  | To Discuss |  |
| 45 | Name:<br>C.K.Varma(stakeholder)<br>Organisation:<br><br>Email:<br>ck_varma@yahoo.co.in<br>Mobile: 9868603923 | 8     | 14 | General | What is the meaning of “pre requisite group” as mentioned here? This part is creating a question for the adequacy of other groups. If it is significant then consider classifying other groups also in terms of their importance as mentioned earlier.  |  | To Discuss |  |
| 47 | Name:<br>C.K.Varma(stakeholder)<br>Organisation:<br><br>Email:<br>ck_varma@yahoo.co.in<br>Mobile: 9868603923 | 8.1   | 15 | General | I am wondering why lot of explanation has been made here! Similar treatment should be given to other practice groups or an appendix can be added to this standard wherein all such terms can be described with examples like data analytics which also has many subparts like descriptive, diagnostic, predictive and prescriptive types of data analytics and so on. |  | To Discuss |  |

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| 48 | Name:<br>C.K.Varma(stakeholder)<br>Organisation:<br><br>Email:<br>ck_varma@yahoo.co.in<br>Mobile: 9868603923                                     | 8.1.1 | 15 | General   | Many terms have been described here which can be shortened for user comfort.   |  | To Discuss |                              |
| 49 | Name:<br>C.K.Varma(stakeholder)<br>Organisation:<br><br>Email:<br>ck_varma@yahoo.co.in<br>Mobile: 9868603923                                     | 8.2.1 | 16 | General   | Under this, in point c) standards, guidelines, best practices and specifications have all been mentioned. May kindly see for exclusion if any.   |  | To Discuss |                              |
| 50 | Name:<br>C.K.Varma(stakeholder)<br>Organisation:<br><br>Email:<br>ck_varma@yahoo.co.in<br>Mobile: 9868603923                                     | 9     | 16 | General   | Under this performed and managed levels have been mentioned. Unless there is differentiation defined, it is not understood and appreciated which is better. If one reads the two levels under terminology, this clarity is not gained and therefore desired purpose may not be served. The level of objectivity therefore needs to be enhanced at definition level.  |  | To Discuss |                              |
| 51 | Name: G. Mayil Muthu Kumaran(stakeholder)<br><br>Organisation:<br>Email: muthu@nic.in<br>Mobile: 9810119461<br>Comment ID #: LITD_2023-10-117787 | 7.3   | 12 | Editorial | 7.3 Practice – Data Confidentiality<br>The objective of this practice is to protect data against unintentional, unlawful, or unauthorized access, disclosure, or theft. There must be clearly defined and standardized methods to encrypt data based on its classification, and a well-defined and clearly documented key management process.<br><br>Comment: Above highlighted text is grey in color.Suggestion to change the font colour to black. |  | Rejected   | No alternative text provided |

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| 52 | Name: Ashwini Panwar<br>Email: ashwini.panwar@alayalegal.com<br>Mobile: 8949102685 | 7.5.1 | f | General | <p>i. The 'availability of documented data retention and disposal policy' would not suffice as the Outcome of Data Availability Practice.</p> <p>ii. Data retention and disposal policy is required not only from the perspective of 'confidentiality' or 'privacy' but also from the perspective of the larger issue of sustainability and net zero.</p> <p>In this context, may we mention that the storage and computation of data by data centres affects the environment in the following ways:</p> <p>(a) There is consumption of vast amounts of energy and electricity for powering the servers, networking and storage equipment. These servers consume significant energy to function.</p> <p>(b) Data centres consume huge amounts of water through cooling processes to prevent overheating.</p> <p>(c) The e-waste disposed by these data centres can cause significant GHG emissions and releases toxic substances as well.</p> <p>(d) The Cloud infrastructure alone has a greater carbon footprint than the airline industry.</p> <p>Deletion or destruction is a very essential aspect of data management. The standards should provide for various levels of data disposal.</p> | <p>i. The outcome should list down proper practices for retaining and disposing data. The outcomes may be based on ISO or NIST standards for data disposal. These practices and outcomes should consider sustainability factors as well.</p> <p>The following outcomes may be considered for data disposal:</p> <p>a. Data Deletion Strategy</p> <p>b. Secure Data Deletion Methods involving techniques overwriting, deletion, destruction based on the storage media being used.</p> <p>c. Regular Audit and Compliance Checks to implement data deletion procedures.</p> <p>Have in place mechanisms for reporting and tracking data deletion activities and compliance metrics.</p> | To Discuss |
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