BUREAU OF INDIAN STANDARDS

AGENDA

14th MEETING OF 'E-LEARNING' SECTIONAL COMMITTEE, LITD-19
(Virtual meeting)

Date & Time	24th April 2024, 10:30hrs – 13:00hrs
Meeting link	https://bismanak.webex.com/bismanak/j.php?MTID=mb040a051c48f4d1acdab496119795f01
Meeting ID	2513 122 9568
Password	19@14

Chairperson: Dr. N Sarat Chandra Babu, Advisor, DSCI & Former ED, SETS

Member Secretary: Shri Priyanshu Sharma, Scientist 'B' & Assistant Director, BIS

ITEM 0   WELCOME

0.1   Welcome by the Member Secretary
0.2   Opening remarks by the Chairperson

ITEM 1 FORMAL CONFIRMATION OF THE MINUTES OF THE LAST MEETING

1.1 The minutes of the 13th meeting of 'E-Learning' Sectional Committee, LITD 19, which was held on 14 November 2023, were circulated vide email dated 21 December 2023. No comments have been received.

THE COMMITTEE MAY FORMALLY CONFIRM THE MINUTES.

ITEM 2 ISSUES ARISING OUT OF THE PREVIOUS MEETINGS

The following action items came up during the last meeting of LITD 19:

S.No	Action item	Action to be taken by	Update on progress
1.	Progression of documents under development	Member Secretary	Done
2.	Review of ToRs approved by the committee during last meeting	BIS	Under review by the Screening committee of BIS
3.	Letter for co-options & revised nominations to be written	Member Secretary	Done

4.	Participation in the SC 36 Plenary meetings held in March 2024	Indian delegation	Done

ITEM 3 SCOPE & COMPOSITION OF COMMITTEE

3.1 The Scope and composition of LITD 19 with attendance during the past 3 meetings is given in **Annex 1**. The details of panels under LITD 19 is given in **Annex 2**.

3.2 Co-option request has been received from **Amazon India, Bengaluru** – Dr. Malateshgouda Karegoudar Detailed CV is given in **Annex-3**.

3.3 Letters for co-option were written to the following organizations/institutes based on the decision of the committee during the previous meetings:
- NIELIT
- IIM Bangalore

Response is awaited from the above two organizations

3.4 BIS recently reviewed the committee compositions of all Technical committees and participation of the TC members who were not present in the previous two TC meetings along with no prior/post meeting communication to the BIS Secretariat was carefully reviewed. It was **decided** to consider withdrawing such members from the Committee compositions to allow onboarding of active members in the committees. The following members of LITD-19 were withdrawn during the aforesaid exercise:

- IEEE India - Shri Srikanth Chandrasekaran & Shri Munir Mohammed
- Mody University of Science and Technology, Lakshmangarh - Dr Anand Sharma
- Opsmx, Hyderabad – Shri Sandesh Jain

Consequently, letters were written by Head (LITD), BIS to the members listed above on this subject. However, no response was received by BIS from these members regarding continuing their participation/intent of continuation and active contributions.

THE COMMITTEE MAY REVIEW THE SCOPE & COMPOSITION

ITEM 4 UPDATE FROM PANELS UNDER LITD-19

4.1 Panel 1

Scope: Study of two New Work Item Proposals received by LITD-19

Based on the discussions during the last meeting of LITD-19, the three drafts on "Code of practice for Quality Assessment of Online Course Delivery Platform and Course Contents" were circulated as Wide circulation draft for a period of 60 days. Comments have been received given in **Annex-4.** The committee may deliberate.

4.2 Panel 2

Scope: Formulation of Indian Standard for "Requirements for E-text books in Education"

Based on the discussion during the last meeting of LITD-19, the working draft on "Requirements for E-text books in Education" prepared by the panel was circulated as Preliminary Draft for a period of 30 days. Comments have been received given in **Annex-5.** The committee may deliberate.

4.3 Panel 3

Scope: Review of comments on LITD/19/17770 "Information technology for learning education and training Learning analytics interoperability Part 4: Privacy and data protection policies

Based on the discussion during the last meeting of LITD-19, the technical changes as recommended by

the panel, were incorporated in the draft document and the modified draft has been processed for wide circulation for a period of 60 days seeking inputs and comments. The committee may deliberate.

THE CONVENOR MAY PROVIDE UPDATE & THE COMMITTEE MAY DECIDE ON THE DOCUMENTS UNDER DEVELOPMENT

ITEM 5 REVIEW OF PUBLISHED/UNDER DEVELOPMENT STANDARDS

5.1 Review of Published Standards

In accordance with BIS procedures, Indian Standards which are in existence for more than 3 years are to be reviewed for reaffirmation/revision/withdrawal. The committee may also review the following standard since it is due in 2024-25, the latest status along with International standard on which this is based is provided below:

SI No.	IS No.	Title	Review due on	Base Standard	Secretariat Remarks
1.	IS 29163-2 : 2009	Information Technology - Sharable Content Object Reference Model (SCORM) 2004 3rd Edition Part 2 Content Aggregation Model Version 1.1	-	ISO/IEC/TR 29163-2 : 2009	No change
2.	IS 29990 : 2010	Learning services for non - Formal education and training - Basic requirements for service providers	December 2023	ISO 29990 : 2010	Revised by ISO 21001:2018 which is already under development by SSD dept. of BIS
3.	IS 29163-1 : 2009	Information Technology - Sharable Content Object Reference Model (SCORM) 2004 3rd Edition Part 1 Overview Version 1.1	July 2024	ISO/IEC/TR 29163-1 : 2009	No change
4.	IS 19796-3 : 2009	Information technology - Learning, education and training - Quality management, assurance and metrics: Part 3 reference methods and metrics	October 2024	ISO/IEC 19796-3 : 2009	No change
5.	IS 24751-2 : 2008	Information technology - Individualized adaptability and accessibility in E-Learning, education and training: Part 2 Access for all personal needs and preferences for digital delivery	October 2024	ISO/IEC 24751-2 : 2008	No change
6.	IS 29163-3 : 2009	Information Technology Sharable Content Object Reference Model (SCORM) 2004 3rd Edition Part 3 Run-Time Environment Version 1.1	October 2024	ISO/IEC/TR 29163-3 : 2009	No change

SI. No.		Title			
7.	IS 24751-3 : 2008	Information technology - Individualized adaptability and accessibility in E - Learning, education and training: Part 3 "Access for all" digital resource description	December 2024	ISO/IEC 24751-3 : 2008	No change
8.	IS 24751-1 : 2008	Information Technology Individualized--Adaptability And Accessibility In--E-learning, Education And Training--Part 1 Framework And Reference Model	December 2024	ISO/IEC 24751-1 : 2008	No change
9.	IS 23988 : 2007	Information technology - A code of practice for the use of information technology (IT) in the delivery of assessments	January 2025	ISO/IEC 23988 : 2007	Base Standard under revision

5.2 The committee formulated Panel 3 to review the comments received on the Wide circulation draft LITD/19/17770 and provide a suitable recommendation.

SI. No.	Doc No & IS No	Title	Document Type	BIS Secretariat Remarks
1.	LITD/19/25319 (Modified adoption of : ISO/IEC TS 20748-4: 2019)	Information technology for learning education and training -Learning analytics interoperability -Part 4: Privacy and data protection policies	New	The modified draft has been processed for wide circulation for a period of 60 days seeking inputs and comments.

5.3 The following Indian standards have completed WC-draft stage. The committee may deliberate and decide:

SI. No.	Doc No & IS No	Title	Document Type	BIS Secretariat Remarks
1.	LITD/19/23078	Code of Practice for Designing Online Course Contents and Quality Assessment of Course Content Delivery Platform Part 1: Course Content Preparation Current Practices and Compliance Verification Criteria	New	Last date of WC was: 09 February 2024. Comments received on WC draft are given in **Annex-4**
2.	LITD/19/23080	Code of Practice for Designing Online Course Contents and Quality Assessment of Course Content Delivery Platform Part 2: Online Course Contents Quality Model and Assessment Methodology	New	Last date of WC was: 09 February 2024. Comments received on WC draft are given in **Annex-4**

3.	LITD/19/23081	Code of Practice for Designing Online Course Contents and Quality Assessment of Course Content Delivery Platform Part 3: Online course hosting platform quality model and assessment methodology	New	Last date of WC was: 09 February 2024. Comments received on WC draft are given in **Annex-4**

THE COMMITTEE MAY DISCUSS & DECIDE

ITEM 6 GUIDELINES FOR RESEARCH & DEVELOPMENT (R&D) PROJECTS FOR THE FORMULATION AND REVIEW OF STANDARDS INVITING POTENTIAL R&D PROJECTS FROM THE COMMITTEE MEMBERS

Bureau of Indian Standards (BIS) has issued Guidelines for Research & Development (R&D) Projects for the formulation and review of standards inviting potential R&D projects from the committee members.

Guidelines for Research and Development projects and the template for the Terms of Reference (ToR) were shared during the last meeting for the members' perusal.

The following ToRs were approved by the committee during the last meeting:

➢ Implemention of the 2-D Assessment System in Confidence Based Learning (CBL)
➢ Study of Learning Record Store Interoperability Augmented by Blockchain
➢ IoT enabled e-Learning for School Education

Following proposal has been received:

➢ "Development of Augmented Reality (AR)/Virtual Reality (VR) Enhanced e-Learning module for Understanding Electric Vehicle Battery test Standards by Public and Industry professionals" - Dr. R D Kharadkar. Detail given in **Annex-6**.

MEMBERS MAY PROPOSE POTENTIAL R&D PROJECTS PERTAINING TO STANDARD

ITEM 7 PROGRAM OF WORK

7.1 The present program of work of LITD 19 is given in **Annex –7**. The committee may decide on the future roadmap for the committee and potential areas in "ICT for Learning, Education and Training" where standard formulation may be taken up by the committee at the national and the international level. Recently, a lot of work has been going on in JTC 1/SC 36 too. Members are welcome to participate and contribute in these ongoing projects or propose new subjects which may be taken up.

THE COMMITTEE MAY CONSIDER

ITEM 8 INTERNATIONAL ACTIVITES

8.1 LITD 19 is the National Mirror Committee (NMC) to ISO/IEC/JTC 1 SC 36 'Information technology for learning, education and training'. Scope of the committee is given in **Annex-8**.

THE COMMITTEE MAY NOTE

8.2 India is Participating member (P) of ISO/IEC JTC 1/SC 36 and as P-member has obligation to vote and send response on all the documents emanating from this subcommittee. Participating Countries have to nominate their experts on the working Group to participate in international standardization activities.

THE COMMITTEE MAY NOTE

8.3 Plenary Meetings of ISO/IEC JTC 1/SC 36

8.3.1 Debriefing from last Meeting of JTC 1/SC 36

The recent Plenary & WG meetings of ISO/IEC JTC 1/SC 36 was held during 7-15 March 2024 in virtual mode.

Indian delegates who attended the Plenary & WG meetings may kindly debrief and provide an update to the committee.

8.3.2 Upcoming Meeting of JTC 1/SC 36

The schedule of the upcoming plenary and WG meetings of SC 36 'Information technology for learning, education and training' is as follows:

Committee	Meeting	Date	Place
JTC 1/SC 36	41st	19 Sep to 27 Sep 2024	Face to Face

The agenda for 41st SC 36 Plenary meeting is awaited. Members are encouraged to consider participation in the plenary meeting as well as the working group meetings of JTC 1/SC 36.

THE COMMITTEE MAY FINALIZE THE INB CONTRIBUTIONS & THE INDIAN DELEGATION FOR THE NEXT PLENARY MEETING

8.4 The Committee may note and suggest the areas where there is a possibility of contributing towards formulating International Standards. The Committee may also nominate experts on various working Groups.

The experts currently nominated in various working groups of ISO/IEC JTC 1/SC 36 from India are given below:

Working Group	Name of WG	Experts nominated
JTC 1/SC 36/WG 3	Learner information	1. Shri Venkata Narasimharao Nadella, INTEL Bangalore 2. Shri Karthik K S, In personal capacity 3. Dr. R D Kharadkar, IETE
JTC 1/SC 36/WG 4	Management and delivery	1. Shri Venkata Narasimharao Nadella, INTEL Bangalore 2. Shri Karthik K S, In personal capacity 3. Shri M Kumar, CDAC 4. Dr. Shirshendu Roy, In personal capacity
JTC 1/SC 36/WG 7	ITLET - Culture, language and individual needs	1. Ms Vinodhini, In personal capacity 2. Dr. Amit Sata, MEFGI 3. Dr. Jyotsna Kumar Mandal, , University of Kalyani, Nadia

JTC 1/SC 36/WG 8	Learning Analytics Interoperability	1. Shri N.S. Sreekanth, Kannur University 2. Shri H R Mohan, CSI 3. Dr. Sridhar Chimalakonda, IIT Tirupati 4. Dr. Jyotsna Kumar Mandal, University of Kalyani, Nadia 5. Dr. A. Murli M Rao, IGNOU
JTC 1/SC 36/WG 9	Online Course Information Model	1. Prof. Sashikumaar Ganesan, , IISC 2. Dr. Jyotsna Kumar Mandal, University of Kalyani, Nadia 3. Shri Amit Sata, MEFGI 4. Dr. Anand Sharma, Mody University 5. Dr A Paventhan, ERNET 6. Mr. Mohit Shukla, TCS

THE COMMITTEE MAY REVIEW

8.5 Standards of JTC 1/SC 36

8.5.1 A list of standards published by JTC 1/SC 36 is given in **Annex-9**.

THE COMMITTEE MAY EXAMINE AND IDENTIFY THE STANDARDS REQUIRED TO BE ADOPTED AS NATIONAL STANDARDS

ITEM 9 WEBINAR

9.1 Based on the discussions during the last few meetings, the core organizing team having the following members is encouraged to finalize schedule at the earliest for an efficient webinar, considering the fact it has been under discussion since a long time:

➢ Mr M Kumar
➢ Mr Priyanshu Sharma
➢ Dr Sarat Chandra Babu
➢ Dr Mangala Sundar Krishnan
➢ Mr H R Mohan
➢ Dr A Paventhan

THE COMMITTEE MAY DECIDE

ITEM 10 INFORMATION ON E-SALE OF STANDARDS BY BIS

10.1 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 forsale. Standards are available on BIS sales portal https://www.standardsbis.in.

THE COMMITTEE MAY NOTE

ITEM 11 NATIONAL INSTITUTE FOR TRAINING IN STANDARDISATION (NITS)

11.1 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.

ITEM 12 MANAKONLINE

12.1 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. BIS committee related work like, meeting notice, issuing agenda, minutes, P-draft, WC draft etc. is being done through the Standardization portal.

ITEM 13 DATE AND PLACE FOR THE NEXT MEETING

ITEM 14 ANY OTHER BUSINESS

Committee Composition

S.No.	Organization	Member Name	11th 12/07/2022	12th 23/06/2023	13th 14/11/2023	Attendance in last 3 meetings
1.	Data Security Council Of India, Noida	Dr. N. Sarat Chandra Babu(Chairperson)	Y	Y	Y	3/3
2.	Center for Development of Advanced Computing, Pune	Shri M. Kumar (P) Shri N Satyanarayana (A) Shri P. Ramu (A)	Y	Y	Y	3/3
3.	Computer Society of India, New Delhi	Shri H. R. Mohan (P)	N	Y	Y	2/3
4.	ERNET India, New Delhi	Dr. Paventhan Arumugam(P) Hari Krishna Atluri (A)	Y	Y	Y	3/3
5.	Indian Institute of Technology, Tirupati	Dr. Sridhar Chimalakonda	Y (Previously in Personal Capacity)	N	Y	2/3
6.	Indian Institute of Science, Bengaluru	Prof. V Kumaran (P) Prof. Sashikumaar Ganesan (A)	Y	Y	Y	3/3
7.	Indian Institute of Technology Kanpur, Kanpur	Prof. Y. N. Singh (P) Prof Ketan Rajawat (A)	N	Y	Y	2/3
8.	Indian Institute of Technology Madras, chennai	Dr Mangala SundarKrishnan (P)	Y	Y	N	2/3
9.	Indira Gandhi National Open University, New Delhi	Dr A. Murli M Rao (P)	Y	Y	Y	2/3
10.	Inflibnet Center, Ahmedabad	Dr Abhishek Kumar(P) Ms Amrita Devi (A) Shri Dinesh Ranjan Pradhan(A)	-	-	Y	1/1
11.	Intel, Bengaluru	Shri Venkata Narasimharao Nadella (P)	Y	Y	Y	3/3

12.	Kannur university, department of information technology, kannur	Dr N S Sreekanth (P)	N	Y	Y	2/3
13.	Marwadi Education Foundation, Rajkot	Dr Amit Sata (P)	Y	Y	Y	3/3
14.	Ministry of Electronics and Information Technology, New Delhi	Shri A K Pipal (P) Shri Surendra Singh (A)	N	Y	Y	2/3
15.	National Informatics Center, New Delhi	Shri Rajesh Kumar Pathak(P) Ms. Rajani Gupta (A)	Y(delegate)	N	Y	2/3
16.	Society For Electronic Transactions and Security, Chennai	Dr TR Reshmi (P) Dr M Prem Laxman Das(A)	Y	Y	N	2/3
17.	Standardization Testing and Quality Certification (STQC)	Mrs. Nayantara Shrivastava(P) Mr Gautam Prasad (A) Mr. Aditya Kumar Dewangan(A)	-	Y	Y	2/2
18.	Tata Consultancy Services Limited, Mumbai	Shri. Mohit Shukla (P) Ms. Srividya Nandalal (A) Ms. Jigyasa Agarwal (A)	N	N	Y	1/3
19.	The Institution of Electronics and Telecommunication Engineers, New Delhi	Dr. R. D. Kharadkar (P)	Y	N	N	1/3
20.	University of Kalyani, Nadia	Dr. Jyotsna Kumar Mandal (P)	-	Y	Y	2/2
21.	In personal capacity	Shri V. Vinodhini	N	Y	N	1/3
22.	In personal capacity	Ms C.V Syamala	Y	Y	Y	3/3
23.	In personal Capacity	Shri Karthik K.S.	Y	Y	N	2/3

24.	In personal capacity	Dr Shirshendu Roy	Y	N	Y	2/3
25.	In personal capacity	Dr P V Ananda Mohan	Y	Y	Y	3/3
26.	Indian Institute of Technology Kharagpur, Kharagpur	Nomination Awaited	-	-		During last meeting the committee decided to write another letter for their nominations

Annex 2

Overview of Panels under LITD-19

Panel 1: Study of two New Work Item Proposals received by LITD-19

Composition:

1. Dr Mangala Sundar Krishnan, IIT Madras - Convenor
2. Dr M Sasikumar, CDAC
3. Dr Y N Singh, IIT Kanpur
4. Mr N Satyanarayana, CDAC
5. Mr Priyanshu Sharma, BIS

Panel 2: Formulation of Indian Standard on "Requirements for e-textbooks in education"

Composition:

1. Dr P V Ananda Mohan, In personal capacity - Convenor
2. Dr R D Kharadkar, IETE
3. Mr. Mohit Shukla, TCS
4. Mr. M. Kumar, CDAC
5. Dr Jyotsna Kumar Mandal, University of Kalyani
6. Ms C V Syamala, In personal capacity
7. Mr Priyanshu Sharma, BIS

Panel 3: Review of comments on LITD/19/17770 "Information technology for learning education and training Learning analytics interoperability Part 4: Privacy and data protection policies"

Composition:

1. Dr. TR Reshmi, SETS - Convenor
2. Dr A. Murli M Rao, IGNOU
3. Shri Mathivanan Elangovan, Mebot
4. Dr P V Ananda Mohan, In personal capacity
5. Mr Priyanshu Sharma, BIS