

## BUREAU OF INDIAN STANDARDS

### MINUTES

### TWENTY SEVENTH MEETING OF ARTIFICIAL INTELLIGENCE SECTIONAL COMMITTEE, LITD 30 ALONG WITH ITS SUB-GROUPS

<b>DATE : 02-02-2023</b> <b>DAY : Thursday</b> <b>TIME : 1100h – 1330h</b>	<b>VENUE: Webex</b> Meeting link: <a href="https://bisindia.webex.com/bisindia/j.php?MTID=m8b64f7e5062c10ddf9079200b95f965b">https://bisindia.webex.com/bisindia/j.php?MTID=m8b64f7e5062c10ddf9079200b95f965b</a> Meeting number: 2514 2914543 Password: 30@KB
<b>Chairperson:</b> Dr. Pushpak Bhattacharyya	<b>Member Secretary:</b> Shri Kshitij Bathla

List of Participants is given in **Annex-1**.

#### ITEM 0 WELCOME

- 0.1 Mr. Kshitij Bathla, Member Secretary, LITD 30 welcomed all the participants.
- 0.2 Dr. Pushpak Bhattacharyya, Chairperson LITD 30 welcomed all the participants. He wished new year to all the participants. He informed that yesterday's budget speech of Finance Minister has emphasised the importance of Artificial Intelligence and the vision is "Make AI in India and Make AI work for India". He also expressed that committee's work has become more relevant and we should proactively formulate standards in this area. He requested all members to diligently review all documents and to provide their inputs.

#### ITEM 1 FORMAL CONFIRMATION OF THE MINUTES OF LAST MEETINGS

- 1.1. Member Secretary informed that the minutes of the twenty fifth meeting of the Artificial Intelligence sectional committee held on 08 September 2022 and of twenty sixth meeting held on 02 November 2022 were circulated on 6 December 2022 and no comments have been received. The committee formally confirmed the minutes.

#### ITEM 2 SCOPE AND COMPOSITION OF SECTIONAL COMMITTEE LITD 30

- 2.1 The committee noted the following scope of the committee:  
"Standardization in the area of Artificial Intelligence and Big Data"  
Liaison: ISO/IEC JTC 1/SC 42 "Artificial Intelligence"
- 2.2 The Committee considered the composition of "Artificial Intelligence, Sectional Committee LITD 30" and its panel/working groups as given at item 2.2 of the agenda. Member Secretary informed that nominations have been received from National Informatics Center (NIC); Information Technology, Electronics and Communication Department, Government of

Telangana & Nomination is awaited from Department of Science and Technology (DST). The committee decided to again approach Department of Science and Technology (DST). Member Secretary also informed that organizations whose participation is 0/3 were approached and response has been received from Philips and Wadhvani Institute of Artificial Intelligence.

The committee decided that organizations who have neither participated regularly in three meetings nor contributed by way of commenting on any of the documents would be once again requested to consider active participation in the committee work. The committee also decided that in case of no response from such organizations, the organizations would be recommended for withdrawal in consultation with the chairperson LITD 30.

Member Secretary also informed that some co-option requests have been received through BIS standardization portal and same would be shared with the committee for further decision.

Updated composition along with participation status is given in **Annex-2**.

### **ITEM 3 INTERNATIONAL STANDARDIZATION ACTIVITIES**

**3.1** The committee noted the information as given at item 3.1 of the agenda.

#### **3.2 INDIA'S PROPOSALS TO JTC 1/SC 42**

##### **3.2.1 Proposals under discussion**

###### **A. Proposal -Levels of specifications for AI systems**

The committee considered the information as given at item 3.2.1 A) of the agenda. Dr. Nisheeth Srivastava provided quick background of the proposal. Dr. Nisheeth Srivastava informed that from the discussions in SC 42/WG 3 and LITD 30/Panel 3, it has emerged that our proposal can be described as the proposal for need of assurance/need to avoid harm/need to avoid bad outcomes. This could be described as levels of Assurance/Trustworthiness. The AI system that we really want to be sure about that it would not do anything bad or unexpected have to have higher levels of Assurance/Trustworthiness and other AI systems can have low levels of Assurance/Trustworthiness. He informed that we are planning to rename the proposal to "levels of Assurance/Trustworthiness". Further regarding criteria of determination of the levels of Assurance/Trustworthiness, we plan to do this through use case/case study as per the revised proposal.

Mr. Gautam Banerjee informed that this was discussed on 27<sup>th</sup> Jan 2023 meeting of LITD 30/Panel 3 and it had emerged that the proposal could be described as an aspiration model to which product can aspire to achieve.

Member Secretary informed that after meeting on 27<sup>th</sup> Jan 2023, inputs were provided by Ms. Chitra (DRDO) and the inputs have been forward to LITD 30 and its all groups.

Dr. Nisheeth Srivastava informed that he would initiate the task of revision of the proposal and would share the document for inputs of the LITD 30 members before further submission to SC 42/WG 3 for discussion in 16<sup>th</sup> Feb 2023 meeting.

It was decided that based on the inputs and discussions held, proposal would be revised for further discussion in SC 42/WG 3 and efforts should be to get recommendation of SC 42/WG 3 for launch of NP ballot by April 2023 meetings of JTC 1/SC 42.

## B. Proposal -Reliability of AI Systems

The committee noted the information as given at item 3.2.1 B) of the agenda and decided to discuss in next meeting.

### 3.2.2 Status of India's approved proposals to JTC 1/SC 42

a) The committee noted the information as given at item 3.2.2 a) of the agenda. The committee appreciated the efforts of Mr. Gautam Banerjee, project leader of ISO/IEC 24668:2022 and the team of experts who specifically contributed along with Mr. Gautam Banerjee during the development of this standard.

Member Secretary suggested to plan a webinar to promote ISO/IEC 24668:2022 and other under development standards. The committee agreed to the suggestion and decided to tentatively hold webinar in the first/second week of June 2023 and decided to finalize other details in due course. Members were requested to provide suggestion regarding structure of proposed webinar.

b) The committee noted the information as given at item 3.2.2 b) of the agenda.

#### c) Verification and Validation Analysis of AI Systems

The committee noted the information as given at item 3.2.2 c) of the agenda. Member secretary informed that SC 42 has informed that multiple nominations have been received by them in response to call for project editor of ISO/IEC AWI TS 17847 'Verification and validation analysis of AI systems'.

Member secretary informed that a meeting with SC 42 leadership is being planned to discuss further steps and accordingly further update would be shared with the committee.

## 3.3 DOCUMENTS of JTC 1/SC 42

3.3.1 The committee considered the information as given at item 3.3.1. Member Secretary informed that LITD 30/WG 1, LITD 30/WG 2, LITD 30/WG 4 are planning meeting to discuss following documents:

SL. No	Document No. & Title	Closing Date for ISO voting	Last date for inputs by LITD 30/LITD 30 Panel Member/Invitee
1.	ISO/IEC NP 42006 Information technology — Artificial intelligence — Requirements for bodies providing audit and certification of artificial intelligence management systems	22 Feb 2023	15 Jan 2023
2.	CD Consultation - ISO/IEC 42006	22 Feb 2023	15 Jan 2023
3.	CIB to approve registration of ISO/IEC TR - 5259-6 Data quality for analytics and	13 Feb 2023	30 Jan 2023

	machine learning (ML) — Part 6: Visualization framework for data quality,		
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The committee briefly discussed the documents and decided that based on the recommendation of LITD 30/WG 1, LITD 30/WG 2 and LITD 30/WG 4 India’s inputs would be submitted to JTC 1/SC 42.

Member Secretary also informed that earlier at CD ballot we need to vote approval/disapproval/abstention along with comments as appropriate however now CD ballot is only for consultation and only comments need to be submitted.

Further Mr. Gautam Banerjee informed about the ballot to approve David Boyd as JTC 1/SC 42 WG 2 Convener and suggested that we could vote in favour. The committee considered and decided to vote in favour.

**3.4** Member Secretary informed that all experts were requested to provide update regarding their participation in the respective groups by 27<sup>th</sup> January 2023. It was informed that each registered expert need to identify the projects in which they would contribute for their respective working group and regular report of participation shall be provided to LITD 30.

The committee considered the list of experts registered in the Sub-groups (working groups, Ahg etc.) of JTC 1/SC 42 as given in Annex-5 of the agenda. Member Secretary suggested that he could share the list of under development standards along with present status and list of experts contributing to the projects.

The committee decided that all registered experts shall inform the projects in which expert is already contributing/intend to contribute at the earliest. It was also decided that in case of no response from the registered experts by 15<sup>th</sup> June 2023, the non-participating experts and experts who are not providing regular updates would be removed from the respective working group of JTC 1/SC 42.

Representatives of Information Technology, Electronics and Communication Department, Government of Telangana conveyed their interest to contribute to working group 4 of JTC 1/SC 42. The committee decided that new representatives should consider the list of under development standards and accordingly they may inform the working group (along with the project of the working group) to which they would contribute. The committee decided that member secretary should register such new members in the respective group of JTC 1/SC 42 as expert. It was also decided to register member secretary as document monitor in SC 42/AHG 7 ‘JTC1 joint development review’.

**3.5 SC 42 Published Standards**

- a) The committee noted the information as given at item 3.5 a) of the agenda.
- b) The committee considered the information as given at item 3.5 b) of the agenda. The committee decided that ISO/IEC TS 4213:2022 Information technology — Artificial intelligence — Assessment of machine learning classification performance would be shared with the committee for 15 days. Members should examine whether we should adopt ISO/IEC TS 4213:2022 as Indian standard or not. The committee decided that based on the inputs of the members, the decision to adopt ISO/IEC TS 4213:2022 would be taken in consultation with the Chairperson LITD 30.

**3.6 MEETINGS OF JTC 1/SC 42 “ARTIFICIAL INTELLIGENCE”**

**3.6.1 Tenth plenary and Working group meetings of JTC 1/SC 42**

The committee noted the information as given at item 3.6.1 of the agenda.

### **3.6.2 Eleventh plenary and Working group meetings of JTC 1/SC 42**

The committee considered the information as given at item 3.6.2 of the agenda. Member secretary informed that he has received more confirmation after issuance of agenda of LITD 30 meeting. The committee considered and following delegation was finalized for participation in the Eleventh plenary and Working group meetings of JTC 1/SC 42 scheduled to be held during 24<sup>th</sup> -28<sup>th</sup> April 2023:

- a) *Dr. Pushpak Bhattacharyya (IIT Bombay) – HoD (Head of Delegation) SC 42 plenary meetings, WG 3, WG 4 and WG 5 meeting in person at Berlin*
- b) *Mr. Gautam Banerjee (Data Science Foundation)- SC 42 plenary meetings and WG 2 meeting in person at Berlin*
- c) *Dr. Gargi Keeni (In Personal Capacity)- SC 42 plenary meetings in person at Berlin*
- d) *Mr. Satyaki Roy (Nomura Research Institute Consulting and Solutions India Private Limited)- SC 42 plenary meetings and WG 2 meeting in person at Berlin*
- e) *Mr. Sridharan Sankaran (TCS) - SC 42 plenary meetings, WG 1 and WG 3 meeting in person at Berlin*
- f) *Mr Kshitij Bathla (BIS)- SC 42 plenary meetings, AG 3, AHG 6, WG 3 and JWG 2 meetings in person at Berlin*
- g) *Dr. Nisheeth Srivastava (IIT Kanpur) – SC 42 Plenary and WG 3 meeting in person at Berlin*
- h) *Ms Shweta Gupta (National Association of Software and Service Companies)- SC 42 plenary, WG 3 and WG 2 meetings (Remote participation)*
- i) *Mr. Raghavendra S Bhat (Intel) – SC 42 Plenary and JWG 2 meeting (Remote participation)*
- j) *Mr. Narang Kishor (Narnix Techno labs) – SC 42 Plenary and WG 5 meeting (Remote participation)*
- k) *Dr. Shrikant Bhat (ABB India) -SC 42 Plenary and WG 4 meeting (Remote participation)*
- l) *Mr. Raja Balusamy (Samsung) – SC 42/JWG 2 meeting (Remote participation)*

The committee also decided to register Dr. Pushpak Bhattacharyya in WG 3,4 & 5 and Mr Kshitij Bathla in JWG 2 as expert. The committee also decided that all delegates shall also inform the project of respective groups to which delegates would contribute and only based on this information, members would be recommended as delegates for further approvals of competent authority of BIS.

## **ITEM 4 DOCUMENTS IN WIDE CIRCULATION**

**4.1** The committee considered the information as given at item 4.1 of the agenda and finalized the LITD 30 (21245) (Identical To: IS/ISO/IEC TR 24368:2022) for publication as Indian Standard.

**4.2** The committee considered the information as given at item 4.2 of the agenda. Member Secretary informed that SC 42/WG 1 is working on defect reports of ISO/IEC 22989 and ISO/IEC 23053 so committee decided to not finalize LITD 30 (20716) (Identical To: ISO/IEC 22989:2022) and LITD 30 (20717) (Identical To: ISO/IEC 23053:2022) at this stage. It was decided to issue these documents again in wide circulation along with final defect reports of ISO/IEC 22989, ISO/IEC 23053.

## **ITEM 5 PROGRAM OF WORK**

5.1 The committee noted the information as given at item 5.1 of the agenda.

## **ITEM 6 PANEL 3 "LEVELS OF SPECIFICATIONS FOR AI SYSTEMS"**

6.1 The committee noted the information as given at item 6.1 of the agenda.

## **ITEM 7 INFORMATION ON E-SALE OF STANDARDS BY BIS**

7.1. The committee noted the information as given at item 7.1 of the agenda.

## **ITEM 8 NATIONAL INSTITUTE FOR TRAINING IN STANDARDIZATION (NITS)**

8.1 The committee noted the information as given at item 8.1 of the agenda.

## **ITEM 9 MANAKONLINE**

9.1 The committee noted the information as given at item 6.1 of the agenda.

## **ITEM 10 DATE AND PLACE FOR THE NEXT MEETING**

10.1 It was decided to tentatively hold next meeting of LITD 30 on 11<sup>th</sup> April 2023 (1100-1300h) primarily for briefing of Indian Delegation.

## **ITEM 11 ANY OTHER BUSINESS**

11.1 Mr. Gautam Banerjee asked about the support required during editing of standards as project leader. It was informed that ISO Editing team could always be consulted apart from the experts of WG and Member Secretary LITD 30. Further it was also informed that ISO is carrying out pilot projects for online development of standard and if pilot worked out successfully then most of editing issues would be taken care by that tool.

11.2 Mr. Gautam Banerjee and Dr. Pushpak Bhattacharyya suggested to consider proposals regarding estimation frameworks for AI Products, standardization for hyperparameter for neural networks. The committee deliberated that based on further details regarding these ideas the committee may consider in subsequent meetings.

11.3 There being no other business to be discussed, meeting ended with vote of thanks to chairperson and all the participants.

**Annex-1**  
**List of Participants**

1. Prof Pushpak Bhattacharaya (IIT Bombay)
2. Dr Asif Ekbal (IIT Patna)
3. Ms Bhanumati S (CSI)
4. Dr Bikram Jyoti (ICAR)
5. Mr Srinivasa Rao Chalamala (TCS)
6. Dr Anantha Desik (TCS)
7. Mr Sridharan Sankaran (TCS)
8. Dr Amit Sata (Marwadi Education Foundation)
9. Dr M H Kori (IETE)
10. Mr Gautam Banerjee (DSF)
11. Mr Jagadeesh Pampapathi (Philips)
12. Mr Rajendra Singh Sisodia (Philips)
13. Mr Kishor N. Narang (Narnix Technolabs)
14. Ms Manisha Kumari (TEMA)
15. Mr Mrityunjaya Singh (NIC)
16. Ms Priti Gautam (NIC)
17. Prof Nisheeth Srivastava (IIT Kanpur)
18. Ms Parul Shribatham (ISGF)
19. Mr Prashanth PS (ISRO)
20. Prof Praveen Paruchri (IIIT, Hyderabad)
21. Mr G B Praveen (Lytx-India)
22. Ms Raghavendra S Bhat (Intel)
23. Mr Raja Balusamy (Samsung)
24. Ms Ramadevi (ITE&C, Government of Telangana)
25. Ms Rushitha Mandava (ITE&C, Government of Telangana)
26. Mr Satyaki Roy (Nomura Research Institute)
27. Ms Shweta Gupta (NASSCOM)
28. Mr Siddhey G. Shinde (NITI Aayog)
29. Mr. Virender Singh (CII)

**Regret**

30. Dr C. Anantaram (In Personal Capacity)
31. Ms Chitra Viswanathan (CAIR)
32. Dr Shrikant Bhat (ABB)
33. Dr. Alpan (Wadhvani Institute of Artificial Intelligence)