BUREAU OF INDIAN STANDARDS/भारतीय मानक ब्यूरो

Electronics and IT Department/ इलेक्ट्रॉनिक्स और सूचना प्रौद्योनिकी विभाग

Third (3rd) Meeting of "Brain-Computer Interface Sectional Committee", LITD 37

(Virtual Meeting)

Date	05 July 2024
Time	10:30 AM - 11:30 PM
Meeting link (for remote participation)	https://bismanak.webex.com/bismanak/j.php?MTID=mb9c7e448a9fbcd3cd4ddf10eaf6c00d1
Meeting ID	2518 768 7823
Password	LITD37@4
Venue (for face to face participation)	Room Number 357, J Block, D Y Patil International University, Akrudi, Pune

Chairperson: Prof Prabhat Ranjan, Vice Chancellor, D Y Patil International University, Pune
Member Secretary: Ms. Jyoti Kushwaha, Scientist D, BIS

Members Present: List of Participants is given at ANNEX 1

MINUTES

ITEM 0 WELCOME

0.1 The Member Secretary welcomed all the members to the third meeting of LITD 37. After introduction of the members, the Member Secretary requested the Chairperson to kindly deliver his welcome address and initiate the proceedings.

0.2 Prof Prabhat Ranjan extended warm welcome to all the members present and requested all the members for their effective and constructive contribution in standardization activities of the committee. He emphasized on the importance of active participation of the members in the committee meetings and plenary meetings of ISO/IEC JTC 1/SC 43.

0.3 It was also informed to the members that India has proposed hosting of SC 43 Plenary and Working Group meetings next year along with the IEC GM, tentatively in September 2025.

ITEM 1 FORMAL CONFIRMATION OF THE MINUTES OF THE LAST MEETING

1.1 The committee formally confirmed the minutes of the last (3rd) meeting of Brain Computer Interface Sectional Committee, LITD 37, which was held on 28th March 2024 and were circulated vide email dated 7th May 2024 since no comments were received.

ITEM 2 SCOPE & COMPOSITION OF SECTIONAL COMMITTEE

2.1 The committee reviewed the scope and composition as per the information given in item 2.1 and 2.2 of the Agenda. It was decided to re-circulate the scope of the committee with members to revisit the scope, particularly, the part with respect to providing guidance to JTC1, IEC, ISO and other entities developing applications of BCI.

2.2 The committee also discussed regarding forming liaisons with other sectional committee that are working in standardization in areas that have impact and relation with the work going on in LITD 37.

2.3 The committee reviewed composition as given in ANNEX 2 of the Agenda and the co-option request given at 2.3 and decided to co-opt the following organizations:

    i.   iCReate (International Centre for Entrepreneurship and Technology), Ahmedabad
    ii. Indian Institute of Technology (IIT), Kanpur
    iii. DY Patil International University, Pune

2.4 The committee reviewed list of nominated experts in various Working Groups(WG) of JTC 1/SC 43 as given in ANNEX 3 of the Agenda and decided to register and de-register the following members as experts in respective WGs of JTC 1/SC 43:

    i.   De-register Mr Rohit Verma from WG 1 and WG 2.
    ii. Nominate Dr. Nirmal Surya, IFNR as expert in WG2.

2.5 The committee noted the information given under item 2.5 of the Agenda. The committee and the chairman expressed appreciation towards all the wonderful work and extensive contribution in the standardization efforts at ISO/IEC level by the SC 43/WG 1 convener, Dr. Saurin Parikh, SC 43/WG 2 Convener, Dr. Arpan Banerjee and Project Editor for BCI Vocabulary standard, Prof Azizuddin Khan.

    i.   WG 1 convener, Dr. Saurin Parikh, briefed the committee regarding the work undertaken in SC 43/WG 1 including projects such ISO/IEC CD 8663 BCI-Vocabulary, ISO/IEC WD 27572 BCI Reference Architecture.

    ii. WG 2 Convener, Dr. Arpan Banerjee, also shared with the committee regarding the work undertaken in SC 43/WG 2 including projects such as ISO/IEC TR 27599 ED Use Cases.

2.6 The committee decided to formulate the following Working Groups corresponding to WGs of SC 43:

    i.   WG 1 Foundational Standards
    ii. WG 2 Applications
    iii. WG 5 BCI data

ITEM 3 PROJECTS UNDER DISCUSSION IN JTC 1/SC 43

3.1 The committee noted the information as given in the item 3.1 of the Agenda. Members were requested to identify areas for contribution among these projects and provide inputs from India.

ITEM 4 INDIAN PROPOSALS ON BCI

4.1 The committee was requested to identify new proposals for standardization in the field of BCI from India.

ITEM 5 INTERNATIONAL STANDARDIZATION ACTIVITIES

5.1 The committee noted the information as given at Item 5.1 and 5.2 of the agenda.

5.2 The members who had participated in the last meeting of JTC 1/SC 43 shared their report of participation verbally during the meeting. The chair emphasized on the importance of physical participation and networking in these meetings.

5.3 The 5th plenary meeting of ISO/IEC JTC 1 SC 43 is scheduled to be held during 2 - 6 Sep 2024 at Sydney, Australia in Face-to-Face (with remote participation) mode. The Indian delegation comprising the following members was approved to attend the said WGs and plenary meetings:

   i. Prof Prabhat Ranjan, DY Patil University (Chair) - Face to Face participation, WG1, WG2, WG5, AG3, AG4, Workshop & Plenary
  ii. Mr. Saurin Parikh, Nirma University (WG 1 convener) –Face to Face Participation, WG1, WG2, WG5, AG3, AG4, Workshop & Plenary
 iii. Dr Arpan Banerjee, NBRC (WG 2 convener) –Face to Face Participation, WG1, WG2, AG4, Workshop & Plenary.
  iv. Prof Aziz Khan, IIT Bombay (Project leader BCI-Vocabulary)–Remote Participation, WG1, WG2, WG 5, Workshop & Plenary.
   v. Dr. Nirmal Surya, IFNR - Remote Participation, WG1, WG 2 & Plenary.
  vi. Mr. Narang N Kishore, Narnix Technologies - Remote Participation, WG 1, WG 2 & Plenary
 vii. Mr. C Sudalaimani, CDAC Trivandrum - Remote participation, WG1, WG 2 & Plenary.
viii. Ms. Jyoti Kushwaha, BIS - Face to Face Participation WG1, WG2, WG5, AG3, AG4, Workshop & Plenary.

5.4 The committee also discussed the active ballot under JTC 1/SC 43 regarding the Strategic Business Plan of SC 43 and members were encouraged to provide their inputs on the same.

5.5 The committee also decided to seek fresh nomination for Liaison officer in SC 43 for IEC SyC AAL.

ITEM 6 RESEARCH & DEVELOPMENT PROJECTS FOR FORMULATION AND REVIEW OF STANDARDS

6.1 The committee noted the information given under item 6.1 of the agenda.

ITEM 7 eBIS Portal (www.manakonline.in)

7.1 The committee noted the information given under item 7.1 of the agenda.

ITEM 8 INFORMATION ON E-SALE OF STANDARDS BY BIS

8.1 The committee noted the information given under item 8.1 of the agenda.

ITEM 9 PROCESS REFORMS IN STANDARDIZATION ACTIVITY OF BIS

9.1 The committee noted the information given under item 9.1 of the agenda.

ITEM 10 NATIONAL INSTITUTE FOR TRAINING IN STANDARDISATION (NITS)

10.1 The committee noted the information given under item 10.1 of the agenda.

ITEM 11 DATE AND PLACE FOR THE NEXT MEETING

11.1 The committee LITD 37 thanked all the members for their active participation and decided to have the next meeting in virtual mode in August 2024 before September Plenary of SC 43.

11.2 With concluding remarks by the chair, the meeting ended with a hearty vote of thanks to the Chairperson and members.

ANNEX 1

LITD 37-Brain-Computer Interface Sectional Committee Participants for 4th Meeting

SI. No.	Name	Organization
1.	Prof Prabhat Ranjan (Chairperson)	D Y Patil International University, Pune
2.	Dr. Arpan Banerjee	National Brain Research Centre, Gurugram
3.	Dr. Avinash Punekar	Indian Institute of Technology Mandi, Kamand
4.	Dr. Gaurav Jaswal	
5.	Mr. P.J. Binu	C-DAC, Thiruvananthapuram
6.	Dr. Sudalaimani C	
7.	Dr. R. Subasree	National Institute of Mental Health and Neurosciences, Bengaluru
8.	Mr. Narang N Kishore	Narnix Technolabs Private Limited, New Delhi
9.	Dr. Nikunj Bhagat	Indian Institute of Science, Bengaluru
10.	Dr. Saurin Parikh	Nirma University, Ahmedabad
11.	Dr. Nirmal Surya	Indian Federation of Neurorehabilitation, Mumbai
12.	Dr. Tapan Gandhi	Indian Institute of Technology, Delhi