



BUREAU OF INDIAN STANDARDS

MINUTES

**23rd MEETING OF 'INTERNET OF THINGS AND RELATED TECHNOLOGIES' SECTIONAL COMMITTEE, LTD 27 IN JOINT SESSION WITH ITS WORKING GROUPS
(E-Meeting, through Webex)**

Time	03 March 2023 (Friday); Time: 1430-1600h
Meeting link	https://bisindia.webex.com/bisindia/j.php?MTID=m33c64d836124ec3f1034be0b240efe51
Meeting ID	2517 319 9286
Password	27@23

Chairperson: Mr Sushil Kumar, DDG (IoT), TEC

Member Secretary: Mr Priyanshu Sharma, Scientist-B & Assistant Director, BIS

S. No.	Organization	Name
3.	Amity University	Dr Tanya Singh
4.	BIS	Mr Jitender Kumar
5.	BITS Goa	Mr Sarang Dhongdi
6.	Capgemini	Mr Yashowardhan Sonwale
7.	C-DAC	Mr Kaushik Nanda
8.	C-DAC	Mr Vaibhav Pratap Singh
9.	ERNET	Dr A Paventhan
10.	Idemia	Mr Pranav Singh
11.	IETE	Dr M H Kori
12.	Kookmin University	Dr Delphin Raj

13.	Jadavpur University	Ms Sarmistha Neogy
14.	K L University	Mr Aravind Kilaru
15.	Marwadi Education	Dr Amit Sata
16.	MeitY	Mr Ravinder Kumar Meena
17.	MeitY	Mr Sushil Kumar Jangid
18.	MITS	Dr N Mohan Krishna Varma
19.	NASSCOM	Mr Sudhanshu Mittal
20.	NIO	Mr Pramod Kumar Maurya
21.	Philips India	Mr Ajit Shenvi
22.	Samsung India	Mr Ankur Bansal
23.	TCS	Mr Abhik Chaudhuri
24.	TEC	Ms Namrata Singh
25.	VIT	Dr Nancy Victor
26.	VIT-AP University	Dr Pavan Kumar Y. V.
27.	VIT-AP University	Dr Pradeep Reddy CH

ITEM 0 WELCOME

- 0.1** Member Secretary, Mr Priyanshu Sharma welcomed all participants to the meeting on behalf of BIS.
- 0.2** Mr Sushil Kumar, Chairperson, LITD 27 extended a warm welcome to the participants. In his brief opening remarks, he emphasized on the role and importance of standards related to “Internet of Things & Digital Twin” and encouraged members for active participation in the LITD-27 committee related activities. It was emphasized by Chairperson that members should make use of the platform provided by BIS for participation in ISO/IEC JTC1/ SC41 as well as in its working group meetings. New work items may be identified for proposing in the next meeting as well as contributions may be submitted on the existing work items in progress of their interest and expertise.

After a brief introduction of the members present, Member Secretary took upon the formal agenda items.

ITEM 1 FORMAL CONFIRMATION OF THE MINUTES OF THE LAST MEETING

- 1.1** The committee formally confirmed the minutes of the last (22nd) meeting of ‘Internet of things & Related Technologies’ Sectional Committee, LITD 27 held on 25 Oct 2022 along with the minutes of various internal meetings before the 12th SC 41 Plenary, which were circulated vide email on 16 December 2022.

ITEM 2 SCOPE & COMPOSITION OF SECTIONAL COMMITTEE

- 2.1** The committee reviewed the scope and composition of LITD 27 given in Annex-1 of the agenda. Member Secretary to write letter seeking review of nominations from the organizations where there has been nil participation in the committee related work (LITD 27 and its Working Groups). Based on the response, the committee may review the composition in the next meeting. Member Secretary added that some of these organizations including MeitY and IETE have been actively participating in the WG activities of LITD 27.
- 2.2** Composition of various Working groups under LITD-27 given in Annex-1 of the agenda was discussed.

ITEM 3 Working Groups/Panels under LITD 27

3.1 WG 3 ‘IoT Architecture’

WG 3 Co-Convenor, Dr Sarmistha Neogy provided a status update of the work under this WG.

3.2 WG 4 ‘IoT Interoperability’

Given the unavailability of WG 4 Convenor/Co-Convenor in this meeting, the committee requested for a status update of the work under this WG in the next committee meeting.

3.3 WG 5 ‘IoT Applications’

WG 5 Convenor, Mr Ankur Bansal apprised the committee of the progress of work & provide a brief of the discussions. The committee noted and appreciated the work done.

Further, the following organizations were co-opted to LITD 27/WG 5:

- *Philips Healthcare Pvt Ltd* – Mr Ajit Shenvi as the Principal member & Mr Rajendra Prasad as the Alternate member
- *Siemens Healthineers* – Mr Maheshappa as the Principal member & Mr Gowri Shanker as the Alternate member
- *Wipro GE Pvt Ltd* – Mr Ramkumar as the Principal member & Mr Dorai Subramaniam as the Alternate member

3.4 WG 6 ‘Digital Twin’

Given the unavailability of WG 6 Convenor/Co-Convenor in this meeting, the committee requested for a status update of the work under this WG in the next committee meeting.

3.5 WG 7 ‘Maritime, underwater IoT and Digital Twin applications’

WG 7 Convenor, Dr Mohan Krishna Varma apprised the committee of the progress of work & provide a brief of the discussions. The committee noted and appreciated the work done.

Further, the following organizations were co-opted to LITD 27/WG 7:

- *BITS Pilani, KK Birla Goa Campus* - Dr Sarang S Dhongdi as the Principal member.

The committee also appreciated the proposal for a physical/hybrid workshop on “Standardization in the area of Underwater Acoustics” in BITS, Goa (tentatively) with joint efforts from NIO & BITS representatives. WG 7 to discuss and prepare a draft plan for the workshop.

3.6 Panel 1 ‘IoT for Stress Management, Good Health & Well-Being’

Panel 1 Convenor, Dr Sarmistha Neogy apprised the committee of the progress of work & provide a brief of the discussions as provided in 3.6 of the agenda. The committee noted and appreciated the work done.

S.No	Organization	Name of expert	Role
1.	Jadavpur University	Dr Sarmistha Neogy	Convenor
2.	BIS	Mr Jitender Kumar	Member
3.	BIS	Mr Priyanshu Sharma	Member (Member Secretary LITD 27)
4.	CDAC	Mr Kaushik Nanda	Member
5.	CDAC	Ms V Karthika	Member
6.	(Deloitte/In personal capacity) To be confirmed	Dr Vikram Venkateshwaran	Member
7.	IETE	Dr M H Kori	Member
8.	MEFGI	Dr Amit Sata	Member
9.	Philips India	Mr Ajit Shenvi	Member
10.	Samsung	Shri Ankur Bansal	Member
11.	Siemens Healthineers	Mr Gowri Shanker	Member
12.	Siemens Healthineers	Mr Maheshappa	Member
13.	Wipro GE Healthcare	Mr Ramkumar	Member
14.	Wipro GE Healthcare	Mr Dorai Subramaniam	Member

ITEM 4 REVIEW OF PUBLISHED INDIAN STANDARDS

4.1 The committee reviewed the Indian Standard due for review during 2022-23. The following **decision** was taken:

<i>Sl.no</i>	<i>IS no. & Title</i>	<i>Present Status of base standard</i>	<i>Due date for review (Month & year)</i>	<i>Decision of the committee</i>
1.	IS/ISO/IEC TR 22417 : 2017 Information Technology Internet of Things (IOT) IOT Use Cases	ISO/IEC TR 22417 : 2017	December 2022	The committee decided to reaffirm the standard for a period of 3 years from due date of review.

ITEM 5 INTERNATIONAL STANDARDIZATION WORK

5.1 JTC 1/SC 41 – ISO/IEC 30177 ED1: “Internet of Things (IoT) - Underwater network management system (U-NMS) interworking” – Indian led project

5.1.1 Project leader, Dr Mohan Krishna Varma apprised the committee of the ongoing debate relating to physical layer and application layer standardization interdependence during the Committee draft stage of the

draft standard. The committee noted the proposed Disposition of Comments as given in **Annex 10** of the agenda. WG 7 Convenor also informed that we may need another internal WG 7 meeting before the SC 41 DoC meeting. The committee noted and appreciated the efforts made by the experts involved.

5.1.2 Other members were also encouraged to submit new contributions for standardization in the forthcoming SC 41 meeting. Given the rich expertise available in our stakeholders, LITD-27 committee & WG members were requested to identify and propose relevant subjects from India at the international level (ISO/IEC JTC 1/SC 41).

5.2 Plenary Meetings of ISO/IEC JTC 1/SC 41

5.2.1 Last Meeting of JTC 1/SC 41

The committee noted and appreciated the active participation from Indian experts during the last Plenary & WG meetings of JTC 1/SC 41 held during 28 Nov-02 Dec 2022.

Further, the committee appreciated and acknowledged the various important agenda items which were catered to by the Indian delegation as briefed in 5.2.1 of the agenda.

5.2.2 Upcoming Meeting of JTC 1/SC 41

The schedule of the upcoming plenary and WG meetings of SC 41 IoT and related technologies is as follows:

Committee	Meeting	Date	Place
JTC 1/SC 41	13 th	12 June to 16 June 2023	Boston, US

The committee noted the information given in 4.2.1 of agenda regarding upcoming (13th) plenary & WG meetings of JTC 1/SC 41 scheduled during 12-16 June 2023 in Boston, USA. Chairperson encouraged members to participate in the plenary & WG meetings and prepare further contributions to be submitted to JTC 1/SC 41. Members were requested to consider participation in the plenary meeting as well as the working group meetings of JTC 1/SC 41.

Based on the inputs received from members till date, the committee formally approved the participation of the delegation as given below for attending the upcoming plenary & WG meetings of JTC 1/SC 41 scheduled in Boston, US during 12 June - 16 June 2023 in person*:

1. Mr Sushil Kumar, Chairperson (LITD 27) – Head of delegation
2. Dr Mohan Varma, MITS
3. Dr Sarang Dhongdi, BITS Goa
4. Mr Ravinder Meena, MeitY
5. Dr Amit Sata, MEFGI
6. Dr Pradeep Reddy, VIT-AP University
7. Mr Jitender Kumar, Scientist-E & Head (HRD), BIS
8. Mr Priyanshu Sharma, Scientist-B & Member Secretary, LITD 27, BIS

*Subject to approval of the parent organization

It was clarified by the Member Secretary that the transition from in person to online attendance is possible, however, the other way around it may not be possible since approval of the file for physical delegation needs time.

Further, it was decided that the delegation may be modified and further members may be added based on the communication received by the Member Secretary by Friday, 10 March 2023 if they intend to attend

the meeting in person. The committee decided that the final delegation may be finalized by Chair, LITD 27 through email.

In addition, the following members have expressed their desire to attend the upcoming plenary & WG meetings scheduled in Boston, US during 12 June - 16 June 2023 remotely:

1. Mr Pramod Maurya, NIO
2. Mr Abhik Chaudhuri, TCS
3. Mr Ankur Bansal, Samsung
4. Dr Aravind Kilaru, KL University
5. Dr Sarmistha Neogy, Jadavpur University

Other members may attend the meeting virtually and the names shall be approved in near future.

The Indian contributions may be finalized in due course of time. Broadly, the Indian delegation is proposed to discuss the following agenda items during the upcoming Plenary & WG meetings:

1. Submission of NP Form and Working Draft of “IoT for Stress Management, Good health & Well-being” from India to WG 5 of SC 41 after finalization & approval of LITD 27 sectional committee
2. Discussion and disposition of comments of ISO/IEC 30177 “Underwater network management system (U-NMS) interworking” – Indian led project. It needs to be finalized and moved to DIS stage. Efforts to also be made to ensure smooth completion of the project in time.
3. Discussion of ongoing projects in JTC 1/SC 41 where Indian experts have been nominated and presentation of comments sent by India on various documents of SC 41 as noted in 5.2.2 of the agenda.
4. Identification of areas and leadership positions where India may take a lead

5.3 The committee reviewed the list of experts registered in different WGs/AGs/ahGs of JTC 1/SC 41 given in Annex-2 of the agenda and the following recommendations were made:

- Deregistration of Shri Jitender Kumar from AG 6 of ISO/IEC JTC 1/SC 41.

ITEM 6 PROPOSAL FOR PUBLICATION OF ISO/IEC 30118 - OCF SPECIFICATION AS INDIAN STANDARDS

6.1 The committee finalized the 18 documents identical to ISO/IEC 30118 (Part 1 to 18) (Information technology -- Open Connectivity Foundation (OCF) Specification) series of specifications for publication as Indian standards and it was decided to send the F-drafts for these 18 documents as provided in 6.1 of the agenda for publication.

ITEM 7 DOCUMENTS DUE FOR VOTING

The corresponding WG Members were requested to provide inputs on the following two balloting documents so that accordingly, we may finalize vote from Indian NB on these documents. The inputs may be shared with the BIS Secretariat.

S. No	Ref No	Title	Working Group	Due date for voting
1	JTC1-SC41/335/DTR	ISO/IEC DTR 30172 Internet of Things (IoT) – Digital Twin – Use Cases	WG 6	14 April 2023

2	JTC1-SC41/333/NP	JTC1-SC41/333/NP Digital twin – Reference architecture	WG 6	28 April 2023
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ITEM 8 DATE AND PLACE FOR THE NEXT MEETING

8.1 It was decided to schedule the next meeting of LITD 27 in HYBRID mode tentatively in first week of April 2023 (in either Bangalore, Goa or New Delhi). Member Secretary to discuss and communicate the confirmed location and finalized date of meeting **ATLEAST 15 DAYS BEFORE THE MEETING**. The exact date and place for the meeting may be finalized in consultation with Chairperson, LITD 27.

ITEM 9 ANY OTHER BUSINESS

9.1 There being no other items to be discussed, the meeting ended with a vote of thanks to the Chairperson and the participant.

