



BUREAU OF INDIAN STANDARDS/भारतीय मानक ब्यूरो
Electronics and IT Department/इलेक्ट्रॉनिक्स और सूचना प्रौद्योगिकी विभाग

15th meeting of Identification & Data capture techniques, Cards & Security Devices
Sectional committee, LITD 16 in Joint Session with its Sub-Committee and Panels

(Virtual Meeting, through Webex)

Date	29 August 2023
Time	10:30 AM - 1:00 PM
Venue	Virtual (through Webex)
Chairman:	Mr. Umesh Kumar Nandwani, In Personal Capacity
Member Secretary:	Ms. Jyoti Kushwaha

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 Fifteenth meeting of LITD 16. After introduction of the members, the Member Secretary requested the Chairperson to kindly deliver his welcome address and initiate the proceedings.
- 0.2** Shri U K Nandwani 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 expressed that it had been a long time since the committee had met and emphasized on the importance of active participation of the members in the committee meetings. He urged members to contribute meaningfully to the formulation of standards under this committee.
- 0.3** He then requested member secretary to carry on with the further agenda items.

ITEM 1 FORMAL CONFIRMATION OF THE MINUTES OF THE LAST MEETING

- 1.1** Member Secretary informed that the minutes of the fourteenth meeting of the Identification & Data capture techniques, Cards & Security Devices sectional committee held on 26 May 2022 were circulated. No comments were received on the minutes. The committee formally confirmed the minutes.

ITEM 2 SCOPE & COMPOSITION OF SECTIONAL COMMITTEE

2.1 The committee noted the following scope of the committee-
Standardization in the area of:

- a) Smart Cards, Identification cards, security devices and interface associated with their use in inter-industry applications and international interchange.
- b) Data formats, data syntax, data structures, data encoding, and technologies for the process of automatic identification and data capture and of associated devices utilized in inter-industry applications and international business interchanges and for mobile applications.

2.2 The Committee considered the composition of “Identification & Data capture techniques, Cards & Security Devices Sectional Committee, LITD 16” and its panel/working groups as given at item 2.2 of the agenda and decided to make the following changes in the composition:

2.2.1 Withdraw the following organizations from the Sectional Committee:

- 2.2.1.1 Apple India Private Limited, Bengaluru
- 2.2.1.2 Canon India Private Limited, Gurugram
- 2.2.1.3 Central Institute of Plastics Engineering and Technology, Murthal
- 2.2.1.4 HP India Sales Private Limited, Bengaluru
- 2.2.1.5 National Payments Corporation of India, Mumbai
- 2.2.1.6 RENSAR Electric Private Limited, Bengaluru
- 2.2.1.7 Tata Consulting Engineers Limited, Navi Mumbai
- 2.2.1.8 UL India Private Limited, Bengaluru

2.3 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 and if required fresh nominations may be sought.

- 2.3.1.1 Computer Society of India, New Delhi
- 2.3.1.2 Controller of Certifying Authorities, Ministry of Electronics and Information Technology, New Delhi
- 2.3.1.3 Delhi Integrated Multi-Modal Transit System Ltd, New Delhi
- 2.3.1.4 Delhi Metro Rail Corporation Limited, Delhi
- 2.3.1.5 Ministry of Electronics and Information Technology, New Delhi

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 16.

2.4 Member Secretary informed that nominations are still awaited from Ministry of Housing and Urban Affairs (MoHUA) and Ministry of Road Transport and Highways (MoRTH). The committee decided to again approach them for nomination of members. It was suggested to reach out to Ministry of External Affairs (MEA) as well for their participation.

2.5 It was further decided by the committee to reach out to The India Electronics and Semiconductor Association (IESA) for their participation in the Sectional Committee.

- 2.6** The committee decided regarding the co-option requests as follows:
- 2.6.1** Mr. Shreenivas Hegde, CTO, Secure Machines Pvt Ltd: It was felt that the domain area of Secure Machines Pvt Ltd is not relevant to the committee scope of work and hence their cooption request was rejected.
 - 2.6.2** Mr. Dinesh Chand Sharma, Director, Standards & Public Policy, EU Project SESEI: The committee felt that the experience and profile is not relevant to the scope of work of the committee. Further there was no response from over email correspondence and hence their cooption request was rejected.
 - 2.6.3** Mr. Ajay Rao, ZEBRA Technologies India Pvt Ltd.: The committee decided to co-opt the member as the organization work area was felt relevant.
 - 2.6.4** Mr. Samson Purre, Kyros Soft Tech Limited: As there was no response from the organization over email correspondence and it appeared that they have moved in to different sectors. Hence their cooption request was rejected.
 - 2.6.5** Mr. Vishnu Vyas, Dupont: Dupont was invited to the meeting for presentation regarding the contribution expected from them but they did not respond or attended the meeting. The domain of the said organization was also felt not compatible with the committee’s scope of work and hence the cooption request was rejected.
- 2.1** The committee decided the following changes in the composition of its subcommittee LITD 16:1
- 2.1.1** Co-opt Mr Nakul Patel, Shreenath Smart Technologies Private Limited, Ahmedabad.
 - 2.1.2** Shri Madhusudhanan Sampath, Infineon informed that Shri Shreenivas Hegde is no longer associated with the said organization and requested that he mane be removed. The committee agreed and asked to send revised nominations.
- 2.2** The committee also decided the following changes in the composition of Panel 4 :
- 2.2.1** Committee suggested to co-opt members from Indian Common Criteria Certification Scheme (IC3S), operated by STQC (IC3S) from Standardization Testing and Quality Certification (STQC). It was suggested to write to Shri Suresh Chandra Head(IC3S) seeking his interest in contributing to the committee work.
 - 2.2.2** Co-opt Shri Manish Verma, CDAC
 - 2.2.3** Co-opt Shri Madhusudhanan Sampath, Infineon in lieu of Shri Shreenivas Hegde as he has left the organization and.
 - 2.2.4** Co-opt ST Microelectronics Private Limited, Greater Noida.
 - 2.2.5** Co-opt Samsung India Electronics Private Limited, New Delhi
 - 2.2.6** Committee also suggested to seek Nomination from NIC to be co-opted in the panel.
- 2.3** Updated composition along with participation status is given at [ANNEX 2](#).

ITEM 3 RECENTLY PUBLISHED STANDARDS

- 3.1** The committee noted the information as given at Item 3.1 of the Agenda.
- 3.2** The committee requested Shri U K Nandwani to review IS 14173 (Part 2): 2022 (Identical To: ISO/IEC 7812-2:2017) Identification cards Identification of issuers Part 2: Application and registration procedures, to ensure that the registrations

mentioned herein are applicable globally as well as at Indian level while drawing the reference to the Mandatory registration scheme for electronic products of MeitY.

ITEM 4 PROGRAM OF WORK OF LITD 16

- 4.1. The committee noted the information as given at Item 4.1 of the agenda.
- 4.2. The committee suggested to peruse the list of published standards to ensure that the standards are in relevance to the scope of work. The members were requested to go through the POW and share their comments over email.
- 4.3. It was decided to take up the review of standards in the next meeting.

ITEM 5 ACTIVITIES OF THE SUBCOMMITTEES/PANELS UNDER LITD 16

5.1. Sub Committee LITD 16: 1 ‘Cards and personal Identification’: A presentation was given by Ms Savita Kashyap, CDAC in which she informed updates with respect to the development of IS 16995 series.

5.1.1. It was informed that an amendment to IS 16995 (Part 2) is ready to be circulated to all the members for their comments and subsequently for its adoption.

5.1.2. The committee was also informed that another standard in the series IS 16995 (Part 3) for Test Suites is also ready. CDAC was requested to share the document for circulation to committee members.

5.2. LITD 16/P3- National Common mobility card (NCMC) Ecosystem: This panel had been formulated at the request of MoHUA for working on the standards in NCMC ecosystem. However, the Panel is currently not active due to lack of response at their end. Since in principal the conceptual relevance still exists for such standards, the committee decided to approach MoHUA regarding the need of the standardization regarding the relevance of need at National Common Mobility Card Ecosystem. It was suggested that BIS can approach MoHUA Based on their response the Panel can be reviewed.

5.3. LITD 16/P4- Guidelines on issuance of composite certification: A presentation was given by Ms Savita Kashyap, CDAC on behalf of Panel 4 regarding the progress with respect to adoption of the SCOSTA test suites used by NIC as Indian standards and the concept of composite certification which was greatly appreciated by the Committee.

5.3.1. During discussion the matter of a composite certification, especially for e-passports, was deliberated. It was stated that flash is a common mode of OS rather than ROM-based OS in modern chips. The chip manufacturer therefore provides a chip that carries a skeleton software in ROM to run an OS from the flash after its validation.

5.3.2. It was further deliberated that the hardware (including the skeleton software) typically achieves EAL 5+ certification.

5.3.3. Prof. Moona mentioned that this skeleton software is akin to boot loader in general procedure operating systems.

5.3.4. For a greater competition, multiple OS vendors and chip vendors are desired to be eligible for solution. Since the OS is typically not by the chip vendor and a general purpose software can't reach EAL 5+ certification, the chip + skeleton software + OS cannot be EAL 5+ certified.

- 5.3.5. The composite certification therefore is applicable on chip + skeleton software in case of flash based components.
- 5.3.6. It was further stated that the OS functionality is tested for behavioral correctness by certification process of STQC/NIC. It is therefore in the interest of security and larger participation that OS certification be out of the scope of CC such that the chip + loading software can be of higher level of certification (EAL 5+).

ITEM 6 DRAFT INDIAN STANDARDS UNDER DEVELOPMENT

S. N O	Document Number	Title	Stage	Remarks
1.	LITD/16/17422 (adoption of ISO/IEC TR 18268:2013)	Identification cards Contactless integrated circuit cards Proximity cards Multiple PICCs in a single PCD field	WC-draft	The committee felt that the document needs to be reviewed from the perspective of the type of standard (whether to be adopted as a requirement standard or a guideline). The committee requested Prof. Rajat Moona to review the document and submit his recommendations before the next meeting.
Adoption of the series ISO/IEC 18013 standards on Driving licence				
2.	LITD/16/17418 - ISO/IEC 18013-1:2018	Information technology — Personal identification — ISO-compliant driving licence — Part 1: Physical characteristics and basic data set	WC -draft	The base standard is under Review. It was decided to drop the document and adopt the Revised Standard
3.	LITD/16/17419 - ISO/IEC 18013-2:2020	Personal identification — ISO-compliant driving licence — Part 2: Machine-readable technologies	P-draft completed	One amendment has been published with respect to the base standard and other Amendment is under development. It was decided to adopt the published Amendment as well.
4.	LITD/16/17420 - ISO/IEC 18013-3:2017	Information technology — Personal identification — ISO-compliant driving licence — Part 3: Access control, authentication and integrity validation	P-draft completed	Two amendments have been published on the base standards and the standard itself is in the process of revision. It was decided to drop the said document and to adopt the Revised Standard.
5.	LITD/16/17421 - ISO/IEC 18013-4:2019	Personal identification — ISO-compliant driving licence — Part 4: Test methods	P-draft completed	One amendment on the base document is under development. It was decided to adopt the published Amendment as well
6.	ISO/IEC 18013-5:2021	Personal identification — ISO-compliant driving licence — Part 5: Mobile		It was decided to adopt the standards

	driving licence (mDL) application		
--	--------------------------------------	--	--

Further, the committee requested Prof Moona once again to review the above series of documents and submit a recommendation on the adoption of these documents before the next meeting of the committee. He informed that he would be able to provide inputs based on the review in the next meeting of the committee.

He further informed that India has its own Specification of Indian Driving License that should be perused and reviewed by the committee for adoption as Indian Standard Specifications (ISS) instead of these International standards that were published much later. It was decided to discuss the matter with the concerned ministries and relevant departments such as NIC, MoRTH and MoHUA. It was decided by the committee to take these up in the next meeting.

ITEM 7 INTERNATIONAL STANDARDIZATION ACTIVITIES

- 7.1.** The committee noted the information given under item 7.1 of the agenda.
- 7.2.** The committee noted the information given under item 7.2 of the agenda. The chairman emphasized on active participation of the members in ISO working groups. He instructed members to attend the meetings and to make a practice of submitting report to BIS regarding the same in continuation to our participation as a “P” member in these Sectional Committees at ISO/IEC. In this regard, the committee reviewed the list of experts nominated in various WGs of SC 17 & 31 given in Annex 6 of the agenda and further Nomination were sought. The following nominations were decided to be registered as experts and document monitor during the meeting:
 - 7.2.1.** Mr. Nakul Patel as an expert in the SC17/WG 1, SC17/WG 3, SC17/WG 4, SC17/WG 8, SC17/WG 10 and SC17/WG 11.
 - 7.2.2.** Mr. Madhusudhanan Sampath as an expert in SC17/WG 11.
 - 7.2.3.** Mr. Rajesh Kushwaha, CDAC as an expert in SC17/WG 4.
 - 7.2.4.** Ms. Jyoti Kushwaha as expert in SC17/WG 3, SC 17/WG 4, SC 17/WG8, SC 14/WG10, & SC31/WG 2
 - 7.2.5.** Ms. Jyoti Kushwaha, Member Secretary in the SC 17/AG 1, SC 17/AG 3, SC 17/WG 1, SC 17/WG 11, SC 17/WG 12, SC 31/WG 1, SC 31/WG 2, SC 31/WG 4 and SC 31/WG 8 as document monitor.
- 7.3.** It was decided that the additional nominations will also be sought over email after the meeting and the same to be included in the Global directory with the approval of the Chair.
- 7.4.** The committee reviewed documents listed in Annexure 7(a) & 7(b) as per the item 7.3 of the agenda. Mr Suresh Sawhney was assigned the task of reviewing the ISO/IEC 18000 series of standards for adoption.
- 7.5.** Further, it was decided to circulate the list of the documents to all members for their inputs.
- 7.6.** The committee noted the information given under item 7.4 of the agenda. The chairperson mentioned that it was of utmost importance that the ballot documents may be reviewed by the members and comments on the same were furnished and

ensure our participation as “P” member of the respective SCs of ISO.

- 7.7.** The committee noted the information given under Item 7.5 of the agenda regarding the forthcoming Meetings of ISO/IEC/JTC 1 SC 17 and ISO/IEC/JTC 1 SC 31. It was observed that the plenary meeting of SC 17 and Sc17/WG3 is held in Face-to-Face (F2F) mode only. As many of the registered experts might be unable to attend the meetings in person, it was decided to write to the secretariat for providing a VC link for participation, if feasible this time.

Based on the discussions, the following delegation was proposed:

- Mr. U K Nandwani, Chairperson, LITD 16 (HoD), if remote participation is feasible --- Plenary meeting of SC 17
- Mr. Nakul Patel, F2F mode - SC 17/WG3, SC17/WG 10, SC17/WG 11 & Plenary meeting of SC 17
- Mr. Manish Kumar Verma, if remote participation is feasible -- SC 17/WG3
- Ms. Jyoti Kushwaha, BIS (Remote Participation for SC 17/WG4, SC17/WG 10, SC17/WG 11 & if remote participation is feasible Plenary meeting of SC 17

ITEM 8 EMERGING AREAS FOR STANDARDIZATION

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

ITEM 9 INFORMATION ON E-SALE OF STANDARDS BY BIS

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

ITEM 10 PROCESS REFORMS IN STANDARDIZATION ACTIVITY OF BIS

- 10.1.** The committee noted the information given under item 10.1 of the agenda. Further, reforms and initiatives taken in the standardization activity of BIS were informed to the committee. The member secretary once again emphasized on the importance of participation of members in the committee meeting and harmonization of the standards.

ITEM 11 NATIONAL INSTITUTES FOR TRAINING IN STANDARDISATION (NITS)

- 11.1.** The committee noted the information given under item 11 of the agenda.

ITEM 12 eBIS Portal (www.manakonline.in)

- 12.1.** The committee noted the information given under item 12 of the agenda.

ITEM 13 DATE AND PLACE FOR THE NEXT MEETING

It was decided to convene the next meeting in second week of December. The exact date and place for the next meeting will be decided in consultation with the Chairman.

ITEM 14 ANY OTHER BUSINESS

There being no other business, the meeting ended with a hearty vote of thanks to the Chairperson and members.

ANNEX-1

S. No	Name	Organization	Email
1	Shri Anurag Ashok	e-Smart Systems Limited	anurag.ashok@e-smartsystems.com
2	Dr. Jyotsna Kumar Mandal	The Institution of Electronics and Telecommunication Engineers	jkm.cse@gmail.com
3	Shri M.P. Sharma	Electronics Regional and Test Laboratory (North)	m-p-sharma@rediffmail.com
4	Mr. Manish Selal	Ministry of Electronics and Information Technology-Standardization Testing and Quality Certification (STQC)	manishselal@stqc.gov.in
5	Shri Madhusudhanan Sampath	Infineon Technologies India Private Limited	madhusudhanan.sampath@infineon.com
6	Shri Nakul Patel	Shreenath Smart Technologies Private Limited,	nakul@sstpl.co
7	Shri Nitin Kumar Agrawal	e-Smart Systems Limited	n.agrawal@e-smartsystems.com
8	Prof Rajat Moona	Indian Institute of Technology Gandhinagar	moona@iitgn.ac.in
9	Mr Rishabh Agarwal	e-Smart Systems Limited	r.agarwal@e-smartsystems.com
10	Shrimati Savita Kashyap	Centre for Development of Advanced Computing	savitakashyap@cdac.in
11	Mr Suresh Sawhney	Dolphin RFID Pvt. Ltd.	suresh@dolphinrfid.in
12	Shri U.K. Nandwani	IN INDIVIDUAL CAPACITY	umeshnandwani011@gmail.com

ANNEX-2

LITD 16-Identification & Data capture techniques, Cards and Security Devices Sectional Committee

S.N o.	Organization	Member Details	Role
1	IN INDIVIDUAL CAPACITY	Name : Shri U.K. Nandwani Email : umeshnandwani011@gmail.com Alternate Email : Phone : Designation : Director General	Chairperson
2	All India Radio, New Delhi	Name : Shri Pradeep Mehra Email : pm@air.org.in Alternate Email : Phone : 011-23421018 Designation : Director (Engg.)	Alternate Member
3	All India Radio, New Delhi	Name : Shri S. K. Srivastava Email : sksrivastava@prasarbharti.gov.in Alternate Email : spectrum-manager@air.org.in Phone : Designation : Dy. Director General (Engg.)	Principal Member
4	Centre for Development of Advanced Computing, Pune	Name : Smt Savita Kashyap Email : savitakashyap@cdac.in Alternate Email : Phone : 9958390904 Designation : Jt Director	Alternate Member
5	Centre for Development of Advanced Computing, Pune	Name : Shri Rajesh Kushwaha Email : rajeshkk@cdac.in Alternate Email : Phone : 9953007211 Designation : Joint Director	Alternate Member
6	Computer Society of India, New Delhi	Name : Prof M. N. Hoda Email : mca.hoda@gmail.com Alternate Email : Phone : 9212022066 Designation : Chairman - Div I	Principal Member
7	Controller of Certifying Authorities, Ministry of Electronics and Information Technology, New Delhi	Name : Shri Ashish Banati Email : abanati@gov.in Alternate Email : Phone : Designation : Deputy Controller (Technical)	Principal Member
8	Delhi Integrated Multi-Modal Transit System Ltd, New Delhi	Name : Shri Alok Sethi Email : alok.sethi@dimts.in Alternate Email : Phone : 9873604833 Designation : GM(TTS)	Principal Member

S.No.	Organization	Member Details	Role
9	Delhi Integrated Multi-Modal Transit System Ltd, New Delhi	Name : Shri Abhishek Srivastava Email: abhishek.srivastava@dimts.in Alternate Email Phone : 9560081788 Designation :	Alternate Member
10	Delhi Metro Rail Corporation Limited, Delhi	Name : Shri VP Singh Email : vpsingh@dmrc.org Alternate Email : Phone : 9599290559 Designation :	Principal Member
11	Dolphin RFID Pvt. Ltd., Mumbai	Name : Shri Suresh Sawhney Email : suresh@dolphinrfid.in Alternate Email : Phone : 28868200 Designation : President & CEO	Principal Member
12	Electronics Regional and Test Laboratory(North), New Delhi	Name : Shri M.P. Sharma Email : m-p-sharma@rediffmail.com Alternate Email : mahavir@stqc.nic.in Phone : 26386280 Designation : Joint Director, Heas MIS	Principal Member
13	Fime India, Bengaluru	Name : Shri Angaj Bhandari Email : angaj.bhandari@fime.com Alternate Email : Phone : 9890049695 Designation :	Alternate Member
14	Fime India, Bengaluru	Name : Shri Hardik Mirani Email : hardik.mirani@fime.com Alternate Email : Phone : 9537301743 Designation : Head, Business Development -India and South Asia	Principal Member
15	Indian Institute of Technology Gandhinagar, Gandhinagar	Name : Prof Rajat Moona Email : moona@iitgn.ac.in Alternate Email : director@iitgn.ac.in Phone : 9993111444 Designation : Director	Principal Member
16	Infineon Technologies India Private Limited, Noida	Name : Shri Madhusudhanan Sampath Email : madhusudhanan.sampath@infineon.com Alternate Email : Phone : 7042000746 Designation : Sr Staff Engineer	Principal Member

S.No.	Organization	Member Details	Role
17	Manufacturers Association for Information Technology, New Delhi	Name : Shri George Paul Email : ceo@mait.com Alternate Email : Phone : 8447837703 Designation : CEO, MAIT	Principal Member
18	Ministry of Electronics and Information Technology, New Delhi	Fresh Nominations Awaited	Alternate Member
19	Ministry of Electronics and Information Technology, New Delhi	Fresh Nominations Awaited	Principal Member
20	Ministry of Electronics and Information Technology-Standardization Testing and Quality Certification (STQC), New Delhi	Name : Shri Manish Selal Email : manishselal@stqc.gov.in Alternate Email : Phone : 7292020742 Designation : Scientist 'B'	Principal Member
21	Ministry of Housing and Urban Affairs, New Delhi	Name : Nomination Awaited Email : Alternate Email : Phone : Designation :	Principal Member
22	Ministry of Road Transport and Highways, New Delhi	Name : Nomination Awaited Email : Alternate Email : Phone : Designation :	Principal Member
23	NXP Semiconductors India Private Limited, Bengaluru	Name : Shri Ajesh Kapoor Email : ajesh.kapoor@nxp.com Alternate Email : Phone : 9811012468 Designation : Director India Region	Principal Member
24	NXP Semiconductors India Private Limited, Bengaluru	Name : Shri Achin Jain Email : achin.jain@nxp.com Alternate Email : Phone : Designation :	Alternate Member
25	Narnix Technolabs Private Limited, New Delhi	Name : Shri Kishor N. Narang Email : kishor@narnix.com Alternate Email : Phone : 9810163990 Designation :	Principal Member

S.No.	Organization	Member Details	Role
26	National Informatics Centre, New Delhi	Name : Shri Rajdeep Choudhury Email : rajdeep.ch@nic.in Alternate Email : Phone : 9810487818 Designation : Scientist - E	Principal Member
27	ST Microelectronics Private Limited, Greater Noida	Name : Shri Prashant Pandey Email : prashant-mpa.pandey@st.com Alternate Email : Phone : Designation :	Principal Member
28	Samsung India Electronics Private Limited, New Delhi	Fresh Nominations Awaited	Principal Member
29	Samsung India Electronics Private Limited, New Delhi	Name : Shri Sanjay Kumar Bansal Email : s.bansal@samsung.com Alternate Email : Phone : 9910214455 Designation : Vice President	Alternate Member
30	Shreenath Smart Technologies Private Limited, Ahmedabad	Name : Shri Nakul Patel Email : nakul@sstpl.co Alternate Email : Phone : 9537066600 Designation :	Principal Member
31	Shreenath Smart Technologies Private Limited, Ahmedabad	Name : Shri Kashyap Makwana Email : kashyap@sstpl.co Alternate Email : Phone : 7574857619 Designation : Head - Technology	Alternate Member
32	Standardization Testing and Quality Certification (STQC)	Name : Shri Gautam Prasad Email : gprasad@stqc.gov.in Alternate Email : Phone : 8939368044 Designation : Scientist - D, STQC HQ	Alternate Member
33	Standardization Testing and Quality Certification (STQC)	Name : Shri Manish Selal Email : manishselal@stqc.gov.in Alternate Email : Phone : 7428920792 Designation : Scientist 'C', ERTL North	Alternate Member
34	Standardization Testing and Quality Certification (STQC)	Name : Ms. A. Datta Email : arpitad@stqc.gov.in Alternate Email : Phone : 9433060351 Designation : Scientist F, ERTL East	Principal Member

S.No.	Organization	Member Details	Role
35	Telecommunication Engineering Center, New Delhi	Name : Shri R. Saji Kumar Email : diri.tec@nic.in Alternate Email : Phone : 23329062 Designation : Director (IC)	Principal Member
36	Telecommunication Engineering Center, New Delhi	Name : Shri Uttam Chand Email : adetit.tec@gov.in Alternate Email : Phone : 8013131137 Designation :	Alternate Member
37	The Institution of Electronics and Telecommunication Engineers, New Delhi	Name : Prof Wg Cdr P Prabhakar Retd Email : pprabs06@yahoo.co.in Alternate Email : Phone : 09814851377 Designation :	Principal Member
38	The Institution of Electronics and Telecommunication Engineers, New Delhi	Name : Dr. Jyotsna Kumar Mandal Email : jkm.cse@gmail.com Alternate Email : jkmandal@klyuniv.ac.in Phone : 9434352214 Designation : Professor	Alternate Member
39	The Institution of Electronics and Telecommunication Engineers, New Delhi	Name : Dr Shiv Kumar Email : shiv@broadbandforum.in Alternate Email : Phone : 9599786300 Designation : Principal Advisor, BroadbandIndia Forum	Alternate Member
40	e-Smart Systems Limited, New Delhi	Name : Shri Anurag Ashok Email : anurag.ashok@e-smartsystems.com Alternate Email : Phone : 9811085040 Designation :	Alternate Member
41	e-Smart Systems Limited, New Delhi	Name : Shri Nitin Agrawal Email : n.agrawal@e-smartsystems.com Alternate Email : Phone : 9999906599 Designation :	Principal Member
42	e-Smart Systems Limited, New Delhi	Name : Shri Rishabh Agarwal Email : r.agarwal@e-smartsystems.com Alternate Email : Phone : 9560006222 Designation : Technical Architect	Alternate Member
43	ZEBRA Technologies India Pvt. Ltd., Noida	Name : Shri Ajay Rao Email : ARao2@zebra.com Alternate Email : Phone : Designation :	Principal Member
44	IN PERSONAL CAPACITY	Name : Shri Vinay Bhushan Taneja Email : vtaneja@meity.gov.in Alternate Email : Phone : 9810166503 Designation : Consultant - STQC	Principal Member

LITD 16 : 01 Sub Committee

S.No.	Organization	Member Details	Role
1	Indian Institute of Technology Gandhinagar, Gandhinagar	Name : Prof Rajat Moona Email : moona@iitgn.ac.in Alternate Email : director@iitgn.ac.in Phone : 9993111444 Designation : Director	Convenor
2	Centre for Development of Advanced Computing, Pune	Name : Ms Savita Kashyap Email : savitakashyap@cdac.in Alternate Email : Phone : Designation : Jt Director	Principal Member
3	Centre for Development of Advanced Computing, Pune	Name : Shri Adarsh pillai Email : adarshpillai@cdac.in Alternate Email : Phone : 9911671234 Designation :	Alternate Member
4	Centre for Development of Advanced Computing, Pune	Name : Shri Manish Email : manishverma@cdac.in Alternate Email : Phone : Designation :	Alternate Member
5	Infineon Technologies India Private Limited, Noida	Name : Shri Madhusudhanan Sampath Email : madhusudhanan.sampath@infineon.com Alternate Email : Phone : 7042000746 Designation : Sr Staff Engineer	Principal Member
6	Manufacturers Association for Information Technology, New Delhi	Name : Shri George Paul Email : ceo@mait.com Alternate Email : Phone : 8447837703 Designation : CEO, MAIT	Principal Member
7	NXP Semiconductors India Private Limited, Bengaluru	Name : Shri Ajesh Kapoor Email : ajesh.kapoor@nxp.com Alternate Email : Phone : 9811012468 Designation : Director India Region	Principal Member
8	National Informatics Centre, New Delhi	Name : Shri Rajdeep Choudhury Email : rajdeep.ch@nic.in Alternate Email : Phone : 9810487818 Designation : Scientist - E	Principal Member

S.N o.	Organization	Member Details	Role
9	Shreenath Smart Technologies Private Limited, Ahmedabad	Name : Shri Nakul Patel Email : nakul@sstpl.co Alternate Email : Phone : 9537066600 Designation :	Principal Member
10	e-Smart Systems Limited, New Delhi	Name : Shri Rishabh Agarwal Email : r.agarwal@e-smartsystems.com Alternate Email : Phone : 9560006222 Designation : Technical Architect	Alternate Member

LITD 16 : P3 - LITD 16/P 3- National Common mobility card Ecosystem Panel

S.N o.	Organization	Member Details	Role
1	American Express, Gurugram	Name : Shri Annette Street Email : annette.street4@aexp.com Alternate Email : Phone : Designation : :	Principal Member
2	American Express, Gurugram	Name : Ms. Himani Badola Narula Email : Himani.Badola@aexp.com Alternate Email : Phone : 9810671309 Designation :	Alternate Member
3	American Express, Gurugram	Name : Shri Arshad Mehdi Email : arshad.mehdi@aexp.com Alternate Email : Phone : 9543448088 Designation :	Alternate Member
4	Centre for Development of Advanced Computing, Pune	Name : Shri Chandan Maity Email : chandanmaity@cdac.in Alternate Email : Phone : 9953524966 Designation : Joint Director	Principal Member
5	Delhi Integrated Multi-Modal Transit System Ltd, New Delhi	Name : Shri Alok Sethi Email : alok.sethi@dimts.in Alternate Email : Phone : 9873604833 Designation : GM(TTS)	Principal Member
6	Delhi Metro Rail Corporation Limited, Delhi	Name : Shri Sudhir Mittal, Email : sudhirmittal@dmrc.org Alternate Email : Phone : Designation:	Principal Member
7	Delhi Metro Rail Corporation Limited, Delhi	Name : Shri Sajeew Maheswari Email : sajeev@dmrc.org Alternate Email : Phone : 9810829880 Designation :	Alternate Member
8	Delhi Metro Rail Corporation Limited, Delhi	Name : Shri VP Singh Email : vpsingh@dmrc.org Alternate Email : Phone : 9599290559 Designation :	Alternate Member
9	Indian Institute of Technology Gandhinagar, Gandhinagar	Name : Prof Rajat Moona Email : moona@iitgn.ac.in Alternate Email : director@iitgn.ac.in Phone : 9993111444 Designation : Director	Principal Member

S.No.	Organization	Member Details	Role
10	Infineon Technologies India Private Limited, Noida	Name : Shri Bula Raja Babu Email : raja.bula@infineon.com Alternate Email : Phone : 7022742280 Designation :	Principal Member
11	Infineon Technologies India Private Limited, Noida	Name : Shri Munjuluri Bala Email : bala.munjuluri@infineon.com Alternate Email : Phone : Designation :	Alternate Member
12	Infineon Technologies India Private Limited, Noida	Name : Shri Ilango Ashok Email : ashok.ilango@infineon.com Alternate Email : Phone : Designation :	Alternate Member
13	Infineon Technologies India Private Limited, Noida	Name : Shri Shukla Gaurav Email : gaurav.shukla@infineon.com Alternate Email : Phone : Designation :	Alternate Member
14	Mastercard	Name : Shri Ashutosh Chadha Email : ashutosh.chadha@microsoft.com Alternate Email : Ashutosh.Chadha@mastercard.com Phone : 9810249641 Designation : Head – Government Affairs and Public Policy	Principal Member
15	Mumbai Metro Rail Corporation Limited, Mumbai	Name : Shri Anuj Goel Email : anuj.ku.goel@relianceada.com Alternate Email : anuj.cse@gmail.com Phone : 9313622348 Designation : General Manager	Principal Member
16	NXP Semiconductors India Private Limited, Bengaluru	Name : Shri Ajesh Kapoor Email : ajesh.kapoor@nxp.com Alternate Email : Phone : 9811012468 Designation : Director India Region	Principal Member
17	NXP Semiconductors India Private Limited, Bengaluru	Name : Shri Achin Jain Email : achin.jain@nxp.com Alternate Email : Phone : Designation :	Alternate Member
18	Narnix Technolabs Private Limited, New Delhi	Name : Shri Kishor N. Narang Email : kishor@narnix.com Alternate Email : Phone : 9810163990 Designation :	Principal Member

S.N o.	Organization	Member Details	Role
19	National Payments Corporation of India,Mumbai	Name : Shri Sanjay Chandak Email : sanjay.chandak@npci.org.in Alternate Email : nishant.gaurav@npci.org.in Phone : 7506446582 Designation :	Principal Member
20	Shreenath Smart Technologies PrivateLimited, Ahmedabad	Name : Shri Nakul Patel Email : nakul@sstpl.co Alternate Email : Phone : 9537066600 Designation :	Principal Member

LITD 16 : P4 - Guidelines on issuance of composite certification Panel

S.No.	Organization	Member Details	Role
1	Centre for Development of Advanced Computing, Pune	Name : Ms Savita Kashyap Email : savitakashyap@cdac.in Alternate Email : Phone : Designation : Jt Director	Principal Member
2	Centre for Development of Advanced Computing, Pune	Name : Shri Manish Email : manishverma@cdac.in Alternate Email : Phone : Designation :	Alternate Member
3	Infineon Technologies India Private Limited, Noida	Name : Shri Madhusudhanan Sampath Email : madhusudhanan.sampath@infineon.com Alternate Email : Phone : 7042000746 Designation : Sr Staff Engineer	Principal Member
4	NXP Semiconductors India Private Limited, Bengaluru	Name : Shri Ajesh Kapoor Email : ajesh.kapoor@nxp.com Alternate Email : Phone : 9811012468 Designation : Director India Region	Principal Member
5	Shreenath Smart Technologies Private Limited, Ahmedabad	Name : Shri Nakul Patel Email : nakul@sstpl.co Alternate Email : Phone : 9537066600 Designation :	Principal Member
6	e-Smart Systems Limited, New Delhi	Name : Shri Nitin Agrawal Email : n.agrawal@e-smartsystems.com Alternate Email : Phone : 9999906599 Designation :	Principal Member
7	Samsung India Electronics Private Limited, New Delhi	Fresh Nominations Awaited	
8	ST Microelectronics Private Limited, Greater Noida		
9	STQC (IC3S)		
10	NIC		