BUREAU OF INDIAN STANDARDS

MINUTES

Panel for Information and Communication : **Fourth Meeting**
Enabled Installations, CED 46:P21
Monday, 29 April 2024 : **1430 h – 1730 h**

In Hybrid Mode from M/s Gujarat International Finance Tec-City (GIFT City), Ahmedabad

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Convener: Shri A. K. Mittal   **Member Secretary**:   Shri Arunkumar S.

NBC Officer: Shri Abhishek Sharma

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Member Physically Present:

1)	Dr Shiv Kumar	Broadband India Forum, New Delhi
2)	Brig Anil Tandon	*Rep.* Broadband India Forum, New Delhi
3)	Shri Ninad Mohan Desai	Building Industry Consulting Service International - India District, Mumbai
4)	Shri Sanjeev Kumar Saddi	*Rep.* Central Industrial Security Force, New Delhi
5)	Shri Vikram Shah	*Rep.* Gujarat International Finance, Tec-city Company Limited, Gandhinagar
6)	Shri Ankit Solanki	*Rep.* Gujarat International Finance, Tec-city Company Limited, Gandhinagar
7)	Shri Vaibhav Madd	Sterlite Technologies Limited, Pune
8)	Md Shahid Khan	*Rep.* Sterlite Technologies Limited, Pune

Member Virtually Present:

9)	Shri Debashish Bhattacharya	*Rep.* Broadband India Forum, New Delhi
10)	Shri Atul Jain	*Rep.* Broadband India Forum, New Delhi
11)	Smt Manisha Kumari	*Rep.* CMAI Association of India, New Delhi
12)	Shri Kshem Kapoor	Rep. Cellular Operators Association of India, New Delhi
13)	Shri Prakash Kumar	Ministry of Electronics & Information Technology, Department of Electronics and Information Technology, New Delhi
14)	Smt Shruti Goel	Proion Consultants, New Delhi
15)	Shri Hemchand Rajput	Shyam Spectra Private Limited, Gurugram

Invitees:

16)	Shri Vineet Sirpaul	Crest Digitel Private Limited, Haryana
17)	Shri Vinay Kumar	Crest Digitel Private Limited, Haryana
18)	Shri Vishal Bahri	RANext Technologies Private Limited, Haryana
19)	Shri Akhouri Santosh	RANext Technologies Private Limited, Haryana
20)	Shri Rakesh Vyas	RANext Technologies Private Limited, Haryana
21)	Shri Jagmohan Singh	RANext Technologies Private Limited, Haryana
22)	Shri Mahendra Srivastava	Telecom Regulatory Authority of India, New Delhi

From BIS:

23) Shri Shubham Chaudhary, Scientist B (Civil Engg)

Item 0   OPENING REMARKS

0.1 Convener, Shri A. K. Mittal, expressed a warm welcome to all members and the invitees to the fourth meeting of the Panel for Information and Communication Enabled Installations, CED 46:P21. He also expressed gratitude to the GIFT City officials for hosting a productive tour earlier in the day and mentioned that the tour provided valuable background for the discussions ahead. After a round of formal introduction of the members and invitees present, the convener suggested a systematic approach to address the agenda items, ensuring focused and efficient deliberations.

Thereafter, it was suggested to take up the Agenda item-wise.

Item 1   CONFIRMATION OF MINUTES OF THE LAST MEETING

1.1 There being no comments on the Minutes of the third meeting of the Panel held on 12 December 2023 in New Delhi that were circulated vide BIS DG letter No. CED 46:P21/A-2.3 dated 26 February 2024, the Panel confirmed the same, as circulated.

Item 2   COMPOSITION

2.1 The Panel noted its composition as given at Annex 1 to the Agenda, reviewed the same and decided/noted as follows:

a) To check for the interest and invite the following in the next meeting before formally co-opting these organizations as members on the Panel:

    i) Original Equipment Manufacturers (OEMs) such as Nokia, Ericsson, etc.
    ii) School of Planning and Architecture, New Delhi (including Prof P. S. N. Rao as one of its representatives).
    iii) Shri T. R. Dua (Digital Infrastructure Providers Association, New Delhi).
    iv) Telecommunication Engineering Centre (TEC) of DoT to also be one of the representatives apart from those involved in standardizing the specification of equipment in DoT.

b)   The Panel noted that Shri Sanjeev Kumar Saddi will represent Central Industrial Security Force, New Delhi as an Alternate Member.

c)   The Panel noted that Md Shahid Khan will represent Sterlite Technologies Limited, Pune as Alternate Member. Md. Shahid Khan also kindly agreed to share the revised nominations formally to BIS.

d)   The Panel requested BIS to obtain the alternate representative of CMAI Association of India, New Delhi through their Prof N. K. Goyal. In this context to Smt Manisha Kumari kindly agreed to do the needful.

e)   The Panel requested BIS to send a final reminder for revised nominations to all those organizations who could did not attend the third and this fourth meeting including, Internet Service Providers Association of India (ISPAI), New Delhi.

f)   The Panel noted the suggestion of Shri Mahendra Srivastava to have Telecom Regulatory Authority of India, New Delhi as an invitee whenever the Panel meeting is held, and agreed to the same.

Item 3   PROJECT OF REVISION OF NBC

3.1   The Panel noted the details of the project of Revision of NBC, the contents of the Code in terms of various Parts and Sections of the 2016 version as given at Annex 2 to the Agenda and the necessity to bring the required coherence of this chapter (Part 8/Section

6) with other chapters of the Code. The Panel also noted that already at appropriate places in the working draft under consideration (sent to all the members on 07 December 2023), reference to other Parts/Sections of the NBC has been made to ensure that users of this Section is given holistic information and comprehensive implementation is facilitated.

3.2 The Panel noted the contents of existing chapter - Part 8 'Building Services' / Section 6 'Information and Communication Enabled Installations' in NBC 2016 as given in Annex 3 of the Agenda.

3.3 The Panel reiterated its commitment to uphold the main principles guiding the revision process as discussed in the last meeting, which include assessing the necessity and extent of new features or services, amending existing text to accommodate changes or fill gaps, and incorporating new text as required. Several proposals were discussed, focusing on technological advancements and industry best practices.

  The Panel recognized the importance of accessible and inclusive design considerations in ICT installations to ensure that communication technologies are accessible to all individuals, including those with disabilities.

. After a detailed discussion, in line with the decision taken in the last meeting regarding constitution of 2 subgroups, namely indoor and outdoor plants and radio

communications. the Panel constituted the same indicating the coordinators and members of these subgroups are follows:

a) <u>Subgroup to consider indoor & outdoor Plants</u>:

Group Coordinator: Dr Shiv Kumar (Broadband India Forum, New Delhi)
Members:
    i)   Shri Ninad Desai, BICSI
    ii) Shri Jagmohan Singh, RANNEXT
    iii) Representative of M/s Sterlite Technologies
        (Additional volunteer members can be added)

b) <u>Subgroup to consider radio aspects of Communications</u>:

Group Coordinator: Shri A.K Mittal

Members:
    i)   Shri Debashish Bhattacharya, Broadband India Forum
    ii) Representative of M/s CREST Digitel
    iii) Shri Tejpal Singh, TRAI
        (Additional volunteer members can be added)

The Panel requested the group coordinators and members of the above mentioned sub-groups to decide and send in a week's time (by **07 May 2024**) their respective Term of Reference (ToR) so as to enable formal confirmation jointly by the convener and BIS; and thereafter circulate to the members of the Panel for their comments/inputs.
The ToR will cover the broad issues including BMS integration, enablement of seamless Wi-Fi infrastructure, street furniture and energy efficiency as already deliberated for consideration by the panel in the last meeting. Apart from the above, the feedback from the visit to GIFT City will also be taken into consideration.

The Panel also decided that the Subgroups will start working based on the clearance of ToR.

(Both the above ToRs have since been received and circulated to all the members of the Panel).

3.4 During the meeting, following invited presentations were made in respect of DCI (Digital Connectivity Infrastructure) in buildings by distinguished speakers/invitees:

a) Sterlite Technologies Ltd presented insights on **Future-ready DCI in Buildings, Cable Trends & Standards**.

b) RANext Technologies Pvt. Ltd presented insights on **Neutral FTTx Infra in Buildings**.

c) Crest Digitel presented insights on **IBS and Intelligent Building Management Solutions (IBMS)**.

Some of the key topics covered, include:

1) POE testing of cables
2) Cable of type A1 and A2 in place of G652D
3) Number of BTS room required for a specified floor area
4) Neutral Network Infrastructure (NNI) within buildings for voice and data connectivity solution and also for IBMS
5) Requirements for NNI Distribution including the connection topology (ring or grid)
6) Fibre Access Terminal (FAT) boxes and their location in different floors

The Panel noted that the presentations offered valuable perspectives on advancing digital connectivity within building infrastructure, covering crucial aspects such as technological trends, standards, and innovative solutions for seamless connectivity and intelligent building management. The Panel thanked the presenters to have come all the way to Gandhinagar and providing valuable information.

The presentations contributed significantly to the discussions on enhancing ICT installations and related data management not only in the construction of buildings but also in the BMS systems in buildings. The sub-groups were authorized to suitably consider and include the related information in the form of compliable provisions in the revision of the chapter.

3.5 The Panel will suitably consider the following aspects after examining the reports of the sub-groups.

1) the provisions relating to regulatory aspects as those followed by M/s GIFT City: https://accreditation.giftgujarat.in/documents/GIFT-Area-Development-Control-Regulations-GDCR-31082021.pdf

2) the provisions relating to "Telecommunication Cabling guidelines for Commercial and Residential Buildings in GIFT City".

3) A new annexure on data centre buildings (BICSI mentioned about the **ANSI/TIA 942** *Telecommunications Infrastructure Standard for Data Centers*)

These aspects will be discussed in the next meeting of the panel.

3.5 The Panel noted the recommendations suggested by Telecom Regulatory Authority of India as given in Annex 4 of the Agenda. The Panel decided to suitably address the following in the revision.

> *"Rating of Buildings or Areas for Digital Connectivity", with a focus on amendments to building codes, essential inclusion of DCI in development plans, roles and responsibilities of DCI professionals, standards review by BIS, certification and capacity building through CoDCI, and mandatory rating of buildings for digital connectivity.*

This matter will be deliberated in the next meeting of the Panel.

3.7 The Panel noted the information shared by BIS for the Manak 0nline portal (the Standardization Portal of BIS) including its **Document Repository** "tab" through which the related documents (other than the Meeting Notice, Agenda, Minutes, Working Draft, Preliminary Draft, Wide Circulation Draft) from BIS will be shared.

Further, information about the following documents listed recently under the Document Repository tab of the Manak Online (the Standardization Portal of BIS) were noted by the Panel.

> 1) BIS' Library can be accessed ONLINE
> 2) TA/DA Guidelines
> 3) Guide to using the Standardization portal
> 4) Guide on HOW TO WRITE A STANDARD

All the members (of the Panel and that of Sub Groups) were requested to periodically visit the Manak Online.

The Panel was also briefed about the information regarding the structural reforms in standardization in BIS and the letter dated November 2023 of DG BIS addressed to all the technical committee members in BIS (available in the above Manak online portal under its **Academic Dashboard** tab and then the **Resource Materials tab**.

Item 4   COMMENTS RECEIVED ON PART 8/SECTION 6 'INFORMATION AND COMMUNICATION ENABLED INSTALLATIONS', OF DOC: SP7 : 2016

4.1 The Panel noted the recommendations received from PQ Welfare Consortium, Mumbai for "Ensuring Compliance with Safety Standards in Healthcare Facilities" which is largely related to the CED 46:P13. As regards the suggestion towards integration of IT electrical systems with medical IMDs in hospital buildings, it was decided to have discussions in the matter by the sub-group in presence of representative from PQ Welfare Consortium, Mumbai or in the next meeting for obtaining specific insights about the issue.

Item 5 DATE AND PLACE OF THE NEXT MEETING

5.1 Next meeting of the Panel will be scheduled in about a month's time where initial suggestions for amendments to existing text in Section 6 of Part 8 and addition of new text/provisions will be discussed.

Item 6   ANY OTHER BUSINESS

6.1 The members of the Panel appreciated the officials of M/s GIFT City for arranging a comprehensive tour and explaining the relevant facilities on the subject which were of relevance and use in revision of the Code as well.

6.2 BIS thanked the management of M/s GIFT City for their local hospitality during the day including the venue for hosting the meeting of the NBC's Panel and especially for accommodating the members of the BIS' Panel in the half-day tour of the first of its

kind and the unique financial service centre in the country which is also being scaled up.

6.3 NBC Officer and the BIS team thanked the Convener, Shri A. K. Mittal for his guidance and insights and he also thanked participants for their valuable inputs and suggestions during the meeting.

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