BUREAU OF INDIAN STANDARDS

AGENDA

Sustainability of Built Environment Sectional Committee, CED 58 : **Seventh Meeting**

Friday, 29 March 2023 : **1500 h**

Bureau of Indian Standards, Manak Bhawan, 9, Bahadur Shah Zafar Marg, New Delhi 110 002

URL:
https://bisindia.webex.com/bisindia/j.php?MTID=m7df89f063c2adedf75f5d3c8b98cbcc8
Meeting ID: 2512 864 3779

Password: ced58

Chairman: Prof. Monto Mani, IISC, Bengaluru

Member Secretary: Shri Sinam Hudson Singh, Scientist-D, CED, BIS

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Item 0 OPENING REMARKS OF CHAIRMAN

Item 1 CONFIRMATION OF THE MINUTES OF THE LAST MEETING

1.1 The minutes of the last meeting of Sustainability of Built Environment Sectional Committee, CED 58 were circulated vide our letter No. CED 58/A-2.6 dated 20 March 2023. No comments have been received.

The Committee may confirm the minutes of the last meeting.

Item 2 SCOPE AND COMPOSITIONS OF THE COMMITTEE

2.1 The present Scope of the committee is given below:

Scope*: 'Standardization in the area Of Sustainability of Built Environment'.*

2.2 The present composition of the Sectional Committee along with the information on attendance of members in the last three meetings is given in **Annex 1**.

The Committee may **NOTE** and **REVIEW** the composition.

2.3 Co-option request has been received from Dr. Sandeep Shrivastava, MNIT(Jaipur) through e-mail as enclosed as Annex-2.

The committee may CONSIDER**.**

2.4 In the last Twenty-Sixth Meeting of Civil Engineering Division Council, CEDC held on 25th August 2022, the Council decided to withdraw the representation of Indian Institute of Architects, Mumbai due to non-participation/no contribution/non-receipt of nominations.

The committee may **NOTE.**

Item 3 ISSUES ARRISING OUT OF LAST MEETING

3.1 In the last 6th meeting of CED 58, The Chairman expressed his view that Sustainability, as such is a diverse subject and there is a need for wider participation from different organizations/expertise. This could effectively cover the scope of the Committee and further requested members to nominate organizations, which they felt would actively participate and contribute in formulation of Indian standards in this area. The Chairman further stressed that a systems perspective integrating societal and planetary wellness, leveraging on the transformative role of the built-environment is crucial and accordingly, proposed to create thematic Working Groups to formulate three documents towards development of the Indian Standards:

a) General principles(terminology/definitions/scope/concept).
b) Built Environment (structure/Functional Performances (FPs)/organization / operation/scope for contribution to wellness).
c) Indicators and assessment (FPs performance/contribution to wellness

The Chairman had requested members to volunteer themselves to be part of these Working Groups so that work could be started on priority. No inputs received.

The committee may **CONSIDER** and **DECIDE**.

Item 4 PROGRAMME OF WORK

The present position of work done by the Committee is given at **Annex 3**.

The Committee may **NOTE**.

Item 5 INTERNATIONAL STANDARDIZATION

5.1 The standardization work on Sustainability of Built Environment at the international level is undertaken at ISO by the sub-committee ISO/TC 59/SC 17 ‘Sustainability in buildings and civil engineering works’ of the technical committee ISO/TC 59 ‘Buildings and civil engineering works’. India is an 'Observer (O)' member of ISO/TC 59/SC 17.

5.2 India is a signatory to WTO Agreement on Technical Barriers to Trade (TBT) and has aligned its standards formulation procedures to the ‘Code of good practices for preparation, adoption and application of standards’. One of the provisions of the code requires BIS to use international standards wherever they exist as a basis for standards

being developed and wherever practicable to do so.

The Committee may **NOTE** the standards published and the subjects under development in of ISO/TC 59/SC 17 as given at **Annex-4** for information and their effective utilization as appropriate in the standardization work undertaken by the Committee.

Item 6 RECOMMENDATION OF THE PLANNING & DEVELOPMENT ADVISORY COMMITTEE OF BIS

The Planning & Development Advisory Committee (PDAC) of BIS has advised that Technical Committees should be sensitized for Eco requirements and standards should be formulated considering the environmental aspects.

The Committee may **NOTE**.

Item 7 WORK PLAN OF THE COMMITTEE

The Committee may consider preparing a work plan for the next three years so as to ensure substantial progress in the standardization work under the Committee.

Item 8 ANY OTHER BUSINESS

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Annex-1

COMPOSITION OF SUSTAINABILITY OF BUILT ENVIRONMENT SECTIONAL COMMITTEE, CED 58

SCOPE STANDARDIZATION IN THE AREA OF SUSTAINABILITY OF BUILT ENVIRONMENT

Nos. of Meetings	Date	Place
Fourth	22 Nov' 2021	New Delhi
Fifth	29 March 2022	New Delhi
Sixth	27 Jan 2023	New Delhi

SI No.	NAME OF THE ORGANIZATION	REPRESENTED BY	STA-TUS	MEETINGS			ATTEN-DANCE
				4th	5th	6th	
1	Indian Institute of Science, Bengaluru	Monto Mani **(*Chairman*)**	T	P	P	P	3/3
2	Bureau of Energy Efficiency, New Delhi	Abhisekh Sharma Akanksha Krishan (Alternate)	T	P	A	A	1/3
3	Cement Manufacturers' Association, Noida	Sujit Ghosh Umesh Soni (Alternate) Shubho Chakravarty (YP)	M	P	P	A	2/3
4	Central Pollution Control Board, New Delhi	J. S. Kamyotra P. K. Gupta (Alternate)	O	A	A	A	0/3
5	Central Public Health & Environmental Engineering Organization, New Delhi	J. B. Ravinder Ankit Jain (Alternate)	O	A	P	A	1/3
6	CEPT University, Ahmedabad	Rajan Rawal Yash Shukla (Alternate)	T	P	P	P	3/3
7	Confederation of Construction Products and Services, New Delhi	Venugopal R (Saint Gobain) Ravishankar Subramanian (DOW Chemicals, Alternate-1) Shailesh Ranjan (Asahi India Glass, Alternate-2)	T	A	P	P	2/3
8	Confederation of Real Estate Developer's Association, New Delhi	**Nomination awaited**	U	A	A	A	0/3
9	CSIR-Central Building Research Institute, Roorkee	Ashok Kumar Kishore Kulkarni (Alternate)	T	A	A	A	0/3
10	CSIR-National Environmental Engineering Research Institute, Nagpur	Ajay Shankar Dubey Nitin P. Naik (Alternate) Sourav Chakravorty (YP)	T	A	A	A	0/3
11	Forest Research Institute, Dehradun	**Nomination awaited**	T	A	A	A	0/3
12	Green Rating for Integrated Habitat Assessment (GRIHA).	**Nomination awaited**	T	-	-	C	0/0
13	Housing and Urban Development Corporation, New Delhi	Manju Safaya Deepak Bansal (Alternate)	U	A	P	A	1/3
14	Indian Green Building Council, Hyderabad	M. Anand	T	A	A	A	0/3
15	Indian Institute of Science, Bengaluru	B. V. Venkatarama Reddy	T	A	P	A	1/3

SI No.	NAME OF THE ORGANIZATION	REPRESENTED BY	STA-TUS	MEETINGS			ATTEN-DANCE
				4th	5th	6th	
16	Indian Institute of Technology Madras, Chennai	Koshy Varghese Sivakumar Palaniappan (Alternate)	T	A	A	A	0/3
17	Indian Society of Heating, Refrigerating & Air Conditioning Engineers, Delhi	Ashish Rakheja Shiv Batra (Alternate) Ashu Gupta (YP)	U	A	A	A	0/3
18	Institute of Town Planners India, Delhi	Shri S. K. Kulshrestha	T	A	A	A	0/3
19	Larsen & Toubro Ltd, Chennai	Sthaladipti Saha S. Rajkumar (Alternate)	T	A	A	A	0/3
20	Ministry of Environment, Forest & Climate Change, New Delhi	Satyendra Kumar(Principal) Bhawana Singh(Alternate)	O	A	A	A	0/3
21	Ministry of Housing & Urban Affairs, New Delhi	J. K. Prasad	T	A	A	A	0/3
22	Ministry of New & Renewable Energy, New Delhi	Arun Kumar Tripathi	O	A	A	A	0/3
23	Ministry of Urban Development, New Delhi	Mathura Prasad Rajesh Khare (Alternate)	O	A	A	A	0/3
24	National Council for Cement and Building Materials, Ballabgarh	Nomination awaited	T	A	A	A	0/3
25	School of Planning & Architecture, New Delhi	Y. K. Jain	T	A	A	A	0/3
26	The Energy and Resources Institute, New Delhi	Shri Sanjay Seth Ms. Shabnam Bassi (Alternate)	T	A	P	P	2/3
27	The Indian Institute of Architects, Mumbai	**Nomination awaited**	T	A	A	A	0/3
28	In Personal Capacity, Thiruvananthapuram	V. Suresh	T	A	A	A	0/3

P - Present A - Absent C - Co-opted YP - Young Professional

Technologist (T)	19
Manufacturer (M)	01
Users (U)	03
Others (O)	05
Total	**28**

Invited Members/Experts:

SI No.	NAME OF THE ORGANIZATION	REPRESENTED BY	STA-TUS	MEETINGS			ATTEN-DANCE
				4th	5th	6th	
1	IIT Delhi	Uma Maheswari	T	P	A	A	1/3
2	IIT Bombay	Chetan Solanki	T	P	P	A	2/3
3	INFOSYS	Swapnil Madhukar Joshi	M	P	P	P	3/3
4	IIT Madras	L.S. Ganesh	T	P	A	A	1/3
5	National Institute of Engineering Mysore	N.C. Balaji	T	A	P	P	2/3
6	College of Engineering, Trivandrum	Aysha S.	T	A	P	P	2/3

Email **Singh**

FW: Regarding CED 58-Sustainability in Building Construction Sectional Committee

From : monto@iisc.ac.in Wed, Mar 15, 2023 10:51 AM

Subject : FW: Regarding CED 58-Sustainability in Building Construction Sectional Committee 1 attachment

To : Singh <shudson@bis.gov.in>

Dear Hudson,

For your kind attention and record.

Regards,

monto

From: Sandeep Shrivastava <sshrivastava.ce@mnit.ac.in>
Date: Saturday, 4 March 2023 at 12:38 AM
To: Monto Mani <monto@iisc.ac.in>
Subject: Regarding CED 58-Sustainability in Building Construction Sectional Committee

External Email

Dear Prof. Monto Mani,

Hope this mail finds you well

I am Dr Sandeep Shrivastava , Assistant Professor in the department of Civil Engineering at MNIT Jaipur. I work and teach sustainable Construction related courses to students. I am PhD in Sustainable construction. In my PhD research, I had developed a system for energy assessment (a part of embodied energy) during the construction phase in the life cycle of buildings.(https://ascelibrary.org/doi/full/10.1061/%28ASCE%29ME.1943-5479.0000412). My research focuses on sustainable materials/construction and their sustainability assessment.

Today only, in a meeting with Mr Arun Kumar from BIS, I learnt about the CED 58 committee regarding sustainability in building construction, which is working successfully under your chairship.

I am very passionate about sustainability in construction and its assessment. Kindly let me know how to become a member of this committee. I assure that I will contribute in a fair way and also will develop a lot from the learned group led by professionals like yourself.

I am copying the link to my professional profile for your reference, which is available at MNIT website.

https://mnit.ac.in/dept_civil/profile?fid=RKuJ

Kindly do let me know the way to join the group. I am very keen to be a part of it. Your support and consent will be a great help.

with sincere thanks and rgds,

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Sandeep Shrivastava, PhD (Rinker Sch. of Building Construction-Univ of Florida/USA),
LEED AP, MIE, AMASCE, MILCE, MIBC
Assistant Professor- Department of Civil Engineering
Malaviya National Institute of Technology
Jaipur- Rajasthan, 302017

Annex-3

CED 58 **SCOPE**	SUSTAINABILITY OF BUILT ENVIRONMENT SECTIONAL COMMITTEE STANDARDIZATION IN THE AREA OF SUSTAINABILITY OF BUILT ENVIRONMENT
LIAISON	ISO/TC 59/SC 17 (O) SUSTAINABILITY IN BUILDINGS AND CIVIL ENGINEERING WORKS

Sl No.	IS Number/ DOC Number	Title	Reaffirm Date	No. of Amd.	Aspect
1	IS/ISO 15392:2019	Sustainability in buildings and civil engineering works — General principles (*first revision*)			O

*** INDICATES STANDARDS UNDER REVISION** **/ INDICATES ADOPTION OF ISO STANDARD**

Annexure-4

Published Standard of ISO/TC 59/SC 17

S. NO	*STANDARD NO.*	*STANDARD NAME*
1.	**ISO/TS 12720:2014**	Sustainability in buildings and civil engineering works — Guidelines on the application of the general principles in ISO 15392
2.	**ISO 15392:2019**	Sustainability in buildings and civil engineering works — General principles
3.	**ISO 16745-1:2017**	Sustainability in buildings and civil engineering works — Carbon metric of an existing building during use stage — Part 1: Calculation, reporting and communication
4.	**ISO 16745-2:2017**	Sustainability in buildings and civil engineering works — Carbon metric of an existing building during use stage — Part 2: Verification
5.	**ISO 20887:2020**	Sustainability in buildings and civil engineering works — Design for disassembly and adaptability — Principles, requirements and guidanc
6.	**ISO 21678:2020**	Sustainability in buildings and civil engineering works — Indicators and benchmarks — Principles, requirements and guidelines
7.	**ISO 21929-1:2011**	Sustainability in building construction — Sustainability indicators — Part 1: Framework for the development of indicators and a core set of indicators for buildings
8.	**ISO/TS 21929-2:2015**	Sustainability in building construction — Sustainability indicators — Part 2: Framework for the development of indicators for civil engineering works
9.	**ISO 21930:2017**	Sustainability in buildings and civil engineering works — Core rules for environmental product declarations of construction products and services
10.	**ISO 21931-1:2010**	Sustainability in building construction — Framework for methods of assessment of the environmental performance of construction works — Part 1: Buildings
11.	**ISO 21931-2:2019**	Sustainability in buildings and civil engineering works — Framework for methods of assessment of the environmental, social and economic performance of construction works as a basis for

		sustainability assessment — Part 2: Civil engineering works
12.	**ISO/TR 21932:2013**	Sustainability in buildings and civil engineering works — A review of terminology
13.	**ISO 22057:2022**	Sustainability in buildings and civil engineering works — Data templates for the use of environmental product declarations (EPDs) for construction products in building information modelling (BIM)

STANDARD UNDER DEVELOPMENT ISO/TC 59/SC 17

S. NO	***STANDARD NO.***	***STANDARD NAME***
1.	**ISO/AWI TS 12720**	Sustainability in buildings and civil engineering works — Guidelines on the application of the general principles in ISO 15392
2.	**ISO/PRF 21928-2**	Sustainability in buildings and civil engineering works — Sustainability indicators — Part 2: Framework for the development of indicators for civil engineering works