

भारतीय मानक ब्यूरो BUREAU OF INDIAN STANDARDS

MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG, NEW DELHI 110002

<u>कार्यसूची</u>

18 नवंबर 2021

हमारा संदर्भ: सीईडी 58/ए-2.4

विषय : निर्मित पर्यावरण की स्थिरता विषय सिमति, सीईडी 58 की चौथी बैठक की कार्यसूची

सीईडी 58 के सभी सदस्य

महोदय,

हमारे समसंख्यक पत्र 09 नवंबर 2021 के संदर्भ में भवन निर्माण की सस्टेनेबिलिटी, सीईडी 58 की चौथी बैठक की कार्यसूची की एक प्रति आपको भेज रहे हैं । बैठक निम्नानुसार आयोजित होगी:

तकनीकी समिति	दिन	दिनांक	समय	स्थान
निर्मित पर्यावरण की स्थिरता विषय समिति, सीईडी 58 की चौथी बैठक की	सोमवार	22 नवंबर 2021	15.00 PM	ब्लू रूम मानक भवन भारतीय मानक ब्यूरो
कार्यसूची				9 बहादुर शाह जफर मार्ग नई दिल्ली 110 002
				URL: https://bisindia.webex.com/bisindia/j.php?MTID=md4f22885c34204270053f9718457c854
				Meeting ID: 2512 972 2581 Password: hudsonced58

सामान्यत: अधिकृत मुख्य व वैकल्पिक सदस्य ही बैठक में आते है। यदि उनका अन्य कोई प्रतिनिधि बैठक में आ रहा है तो कृपया इसकी पूर्व सूचना भेज दें। यदि बैठक में चर्चा के लिए आपका कोई प्रस्ताव हो तो कृपया अधोहस्ताक्षरी को उपरोक्त पते पर भेज दें।

हम आशा करते है कि आप बैठक में उपस्थित होगें और इसकी पुष्टि अभी तक नहीं की है तो कृपया फैक्स/ई-मेल से भेज दें।

धन्यवाद ।

भवदीय

(सिनम हडसन सिंह) वैज्ञानिक 'डी'(सिविल इंजीनियरी)

ई-मेल: <u>shudson@bis.org.in</u> फ़ोन न0: 011-23608557

संलग्न : उपरिलखित



MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG, NEW DELHI 110002

AGENDA

Our Ref: CED 58/A-2.4 18 November 2021

Subject: Agenda for Fourth Meeting of Sustainability of

Built Environment Sectional Committee, CED 58

ALL MEMBERS OF CED 58

Dear Sir,

In continuation to our Meeting Notice of even number dated 09 November 2021, please find enclosed a copy of the Agenda for the Fourth Meeting of Sustainability of Built Environment Sectional Committee, CED 58. The schedule of the meeting is as given below:

Sectional Committee	Day	Date	Time	Venue
Sustainability of Built Environment Sectional Committee, CED 58	Monday	22 November 2021	15.00 PM	Blue Room Bureau of Indian Standards Manak Bhavan 9, Bahahdur Shah Zafar Marg, New Delhi 110 002 URL: https://bisindia.webex.co m/bisindia/j.php?MTID=md4f2 2885c34204270053f9718457c 854 Meeting ID: 2512 972 2581 Password: hudsonced58

Normally, only the nominated Principal and Alternate members attend the meeting. In case their representative(s) are being deputed in their absence, it would be highly appreciated if you can give us prior intimation. Proposals if any for items to be included for discussions or comments may please be sent to the undersigned at the above address.

We hope, you would kindly make it convenient to attend this meeting and a line in confirmation, if not already done so, by e-mail would be highly appreciated.

Thanking you,

Encl: As above

Yours faithfully,

(Sinam Hudson Singh) Scientist 'D' (Civil Engg) E-Mail: shudson@bis.org.in

Phone No.: 011-23608557

BUREAU OF INDIAN STANDARDS

AGENDA

Sustainability of Built Environment : Fourth Meeting

Sectional Committee, CED 58

Monday, 22 November 2021

: 1500 h

Blue Room, Bureau of Indian Standards, Manak Bhawan, 9, Bahadur Shah Zafar

Marg, New Delhi 110 002

Chairman: Prof. Monto Mani, IISC, Bengaluru

Member Secretary: Sinam Hudson Singh

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-2.3 dated 31 March 2016. 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 as given in Annex 2 have been received through e-mails as well as on BIS online portal.

The committee may **CONSIDER**.

2.4 In the last 25th meeting of Civil Engineering Division Council (CEDC) held on 23rd June 2021, the Council had decided to withdraw the representation of Shri T. N Gupta, In Personal Capacity, Noida, in view of sad demise.

The Committee may **NOTE**.

Item 3 ISSUES ARRISING OUT OF LAST MEETING

3.1 In the Last meeting, the Committee, after a lot of deliberation on type of standards to be made on sustainability under this committee, had decided to adopt the system of CEN/TC 350 'Sustainability of Construction Works' for the sustainability assessment of buildings using a life cycle approach. The Committee had also observed that ISO/TC 59/SC 17 were following similar concepts and decided that to consider 08 ISO standards and prepare an equivalent Indian Standard taking into consideration various technological and geographical factors and also the construction practices that are prevailing in the country. Accordingly, the committee had assigned each standard to members identified as given in **Annex-3** and requested them to prepare the initial draft

Further, the Committee had constituted a panel comprising **Dr Rajan Rawal of CEPT University** (As Convener), **Dr Kosy Varghese and Dr Sivakumar Palaniappan of IIT Madras, Shri Deepak Bansal of HUDCO, Dr S Raj Kumar of L&T and Shri Deepak Gahlowt of CCPS.** The panel was requested to coordinate the work of preparation of drafts as mentioned above. The drafts thus prepared by each member were to be circulated among panel members and after approval by panel, and in consultation with the chairman, documents were to be issued as Preliminary drafts. Status of work allocated are given in **Annex-3**

The committee may **REVIEW** the status and **DECIDE**.

3.2 In the last meeting, the committee had requested Prof S.K. Bhattacharyya, Chairman, Dr Kosy Varghese and DrSivakumarPalaniappan of IIT Madras and Dr B.V Venkataram Reddy and Dr Monto Mani of IISc, Bangalore to review various parts of ISO 15686 on service life planning of buildings and constructed assets as given in Annex-4 and suggest the committee on utilization of these standards in Indian context.

Inputs are still awaited.

The Committee may **CONSIDER and DECIDE**

3.3 In the previous meeting, the Committee had requested **NCCBM**, **CMA** and **CBRI** to review ISO 13315-1 :2012 'Environmental management for concrete and concrete structures – Part 1: General principles' and suggest the committee on utilization of these standards in Indian context.

Input is still awaited.

The Committee may **CONSIDER**.

Item 4 PROGRAMME OF WORK

The present position of work done by the Committee is given at **Annex 5**.

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-6** for information and their effective utilization as appropriate in the standardization work undertaken by the Committee.

Item 6 NATIONAL ACTION PLAN FOR STANDARDIZATION

6.1 The Committee noted the details regarding BIS' Standards National Action Plan (SNAP) which proposes a set of actions that would enable BIS to fulfill the specified objectives and drive the national standardization work and active participation in international standardization. The Committee also considered the key standardization areas (relating to Civil Engineering Department) so identified for future standards development, which are listed in **Annex-7** to the Agenda.

Item 7 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 9 WORK PLAN OF THE COMMITTEE

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

Item 10 ANY OTHER BUSINESS

Composition

(Item 2.2)

SI No.	NAME OF THE ORGANIZATION	REPRESENTED BY	STA- TUS				ATTEN -
				1 th	2 th	3 th	DANCE
1	Indian Institute of Science, Bengaluru	Dr Monto Mani (<i>Chairman</i>)	Т	-	-	-	0/0
2	Bureau of Energy Efficiency, New Delhi	Shri Saurabh Diddi	Т	A	А	Α	0/3
3	Cement Manufacturers' Association, Noida	Dr V. Ramachandra Shri Umesh Soni (Alternate) Shri Shubho Chakravarty (Alternate 2)	М	-	С	Р	1/1
4	Central Pollution Control Board, New Delhi	Shri J. S. Kamyotra Shri P. K. Gupta (Alternate)	0	A	Α	A	0/3
5	Central Public Health & Environmental Engineering Organization, New Delhi	Shri J. B. Ravinder Shri Ankit Jain (Alternate)	0	A	A	A	0/3
6	CEPT University, Ahmedabad	Dr Rajan Rawal Shri Yash Shukla (Alternate)	Т	С	Р	A	1/2
7	Confederation of Construction Products and Services, New Delhi	Nomination awaited	Т	-	-	С	0/0
8	Confederation of Real Estate Developer's Association, New Delhi	Nomination awaited	U	С	A	A	0/2
9	CSIR-Central Building Research Institute, Roorkee	Shri R. K. Garg	Т	A	Α	A	0/3
10	CSIR-National Environmental Engineering Research Institute, Nagpur	Shri Ajay Shankar Dubey Shri Nitin P. Naik (Alternate)	Т	Р	A	A	1/3
11	Forest Research Institute, Dehradun	Nomination awaited	Т	С	A	A	0/2
12	Housing and Urban Development Corporation, New Delhi	Smt Manju Safaya Shri Deepak Bansal (Alternate)	U	С	Р	Р	2/2
13	Indian Green Building Council, Hyderabad	Shri M. Anand	Т	Р	Α	Α	1/3
14	Indian Institute of Science, Bengaluru	Dr B. V. Venkatarama Reddy	Т	A	A	A	0/2
15	Indian Institute of Technology Madras, Chennai	Dr Koshy Varghese	Т	А	Р	А	1/3

Composition

(Item 2.2)

SI No.	NAME OF THE ORGANIZATION	REPRESENTED BY	STA- TUS				ATTEN -
				1 th	2 th	3 th	DANCE
16	Indian Society of Heating, Refrigerating & Air Conditioning Engineers, Delhi	Nomination awaited	U	С	P	A	1/2
17	Institute of Town Planners India, Delhi	Shri S. K. Kulshrestha	Т	С	А	A	0/2
18	Larsen & Toubro Ltd, Chennai	Shri Sthaladipti Saha Dr S. Rajkumar (Alternate)	Т	С	Р	A	1/2
19	Ministry of Environment, Forest & Climate Change, New Delhi	Nomination awaited	0	A	A	A	0/3
20	Ministry of Housing & Urban Affairs, New Delhi	Shri J. K. Prasad	Т	Р	Р	A	2/3
21	Ministry of New & Renewable Energy, New Delhi	Dr Arun Kumar Tripathi	0	Р	Р	Α	2/3
22	Ministry of Urban Development, New Delhi	Shri Mathura Prasad Shri Rajesh Khare (Alternate)	0	Р	Α	A	1/3
23	National Council for Cement and Building Materials, Ballabgarh	Nomination awaited	Т	-	-	С	0/0
24	School of Planning & Architecture, New Delhi	Dr Y. K. Jain	Т	Р	Α	Р	2/3
25	The Energy and Resources Institute, New Delhi	Ms Mili Majumdar Ms Sudipta Singh (Alternate)	Т	Р	Р	Α	2/3
26	The Indian Institute of Architects, Mumbai	Nomination awaited	Т	С	A	A	0/2
27	In Personal Capacity, Thiruvananthapuram	Shri V. Suresh	Т	A	A	Р	1/3
28	In Personal Capacity, Noida	Shri T. N. Gupta	T	P	A	Α	1/3

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

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

CO-OPTION REQUEST

(Item 2.3)

SI No.	VC Request ID	Name	Organization	Email ID	Designation
1	8866986173	Mainak Ghosal	Others	mainakghosal2010@gmail.com	Professor
2	9135012698	Dr G Reddy Babu	Gudlavalleru Engineering College	greddybabu66@gmail.com greddybabu1966@gmail.com	Professor
3	4840132716	Rituraj Nagar	L & T LIMITED	rituraj.nagar@gmail.com nagar.sharmishtha@gmail.com	Manager
4	5235967405	Umesh Nair	ITD Cementation India Ltd.	nair_umesh@ymail.com umesh.records@gmail.com	Assistant Manager
5	7673639987	Veeranna Maloth	Administrative Staff College of India, Urban Governance, Hyderabad	veerannamaloth92@gmail.com	Senior Research Associate
6	9465643344	Abhinandan Gupta	Other	gupta.abhinandan@gmail.com	M.E Coordinator
7	9142673393	Shashi shankar	Other	shashi.shankar26@gmail.com	Structure Engineer
8	9204111086	Sonali	Other	sonali.nasikkar@gmail.com	AGM(QA/QC)
9	7460089221	Rahul Sharma	International Zinc Association	rahulsharma.iift@gmail.com	Director (Technology)

CO-OPTION REQUEST

(Item 2.3)

10	0414044027	Amol Sunil Vatsal	Other	amolvatsal@rediffmail.com amolvatsal@gmail.com	HSE Consultant
11	7271674188	Suman Saha	Other	sumansaha@nitc.ac.in sumansahabce@gmail.com	Assistant Professor
12	9752001258	Sri Kalyana Rama Jyosyula	Other	jskr.publications@gmail.com ram.literature@gmail.com	Associate Professor and R&D Coordinator
13	6100723198	Praveen	L&T ECC, CHENNAI	praveenkumar1436.pk@gmail.com drvpraveenkumar@gmail.com	Assistant Construction Manager
14	8257395485	Ankur Bhogayata	Marwadi Education Foundation, Rajkot	ankur.bhogayata@gmail.com anukur.bhogayata@marwadieducat ion.edu.in	Associate Professor and Head of Civil Engineering Department, Faculty of Engineering
15	7684885286	Nageswari	Other	naggujeshi13@gmail.com	Research Scholar
16	5235967405	Umesh Nair	ITD Cementation India Ltd	nair_umesh@ymail.com umesh.records@gmail.com	Assistant Manager

Annex-3 (Item 3.1)

S.No	Standards Published	Work assigned to and status of work	Current status of ISO Standards as given in column no. 2 of Table
1	ISO/TS 12720:2014 Sustainability in buildings and civil engineering works Guidelines on the application of the general principles in ISO 15392	The Committee requested Prof. A K Jain of School of Planning and Architecture, New Delhi and Member Secretary to prepare the initial draft.	No change
		Draft is awaited	
2	ISO 15392:2008 Sustainability in building construction General principles	Indian Standard has been published as IS/ISO 15392:2019/15392:2019	
3	ISO 16745:2015 Environmental performance of buildings Carbon metric of a building Use stage	The Committee requested Dr Rajan Rawal of CEPT University, Ahmedabad to prepare the initial draft. Draft is awaited	i) 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 ii) ISO 16745-2:2017 Sustainability in buildings and civil engineering works — Carbon metric of an existing building during use stage — Part 2: Verification

Annex-3 (Item 3.1)

4	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	The Committee requested Dr Kosy Varghese and Dr Sivakumar Palaniappan of IIT Madras to prepare the initial drafts. Shri Deepak Bansal of HUDCO was agreed to provide necessary inputs, if any.	
5	ISO/TS 21929-2:2015 Sustainability in building construction Sustainability indicators Part 2: Framework for the development of indicators for civil engineering works	Draft is awaited	
6	ISO 21930:2007 Sustainability in building construction Environmental declaration of building products	The Committee requested Dr Rajan Rawal of CEPT University, Ahmedabad to prepare the initial draft. Draft is awaited	ISO 15392:2008 has been revised to ISO 21930:2017 Sustainability in buildings and civil engineering works — Core rules for environmental product declarations of construction products and services
7	ISO 21931-1:2010 Sustainability in building construction Framework for methods of assessment of the environmental performance of construction works Part 1: Buildings	The Committee requested Dr S Raj Kumar of L&T to prepare the initial draft. Draft is awaited	
8	Sustainability in buildings and civil engineering works A review of terminology	The Committee in the last meeting had considered the wide circulation draft and not agreed for adoption of this ISO standard as it is a technical report and contains sources of each and every	

Annex-3 (Item 3.1)

definition, which is not required in a standard.

The Committee requested the members secretary to prepare a draft Indian standard on terminology compiling various terms given in this ISO/TR and Part 11 'Approach to Sustainability' of National Building Code. It was decided the draft would be issued in Wide circulation.

Draft is awaited

(Item No.3.2) (ISO 15686 and its parts)

SI No.	Number	Title
1.	ISO 15686-1:2011	Buildings and constructed assets – Service life planning – part 1: General principles
2.	ISO 15686-2:2001 [Revised to ISO 15686- 2:2012]	Buildings and constructed assets – Service life planning – Part 2: Service life prediction procedures
3.	ISO 15686-3:2002	Buildings and constructed assets – Service life planning – Part 3: Performance audit and reviews
4.	ISO 15686-5:2008 [Revised to ISO 15686- 5:2017]	Buildings and constructed assets – Service life planning – Part 5: Life-cycle costing
5.	ISO 15686-6:2004 [Withdrawn]	Buildings and constructed assets – Service life planning – Part 6: Procedure for considering environmental impacts
6.	ISO 15686-7:2006 [Revised to ISO 15686- 7:2017]	Buildings and constructed assets – Service life planning – Part 7: Performance evaluation for feedback of service life data from practice
7.	ISO 15686-8:2008	Buildings and constructed assets – Service life planning – Part 8: Reference service life and service-life estimation
8.	ISO 15686-9:2008	Buildings and constructed assets – Service life planning – Part 9: Guidance for assessment of service-life data
9.	ISO 15686-10:2010	Buildings and constructed assets – Service life planning – Part 10: When to assess functional performance

(Item 4)

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

SI 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)			0

Annex 6 (Item 5.1)

ISO/TC 59/SC 17

a) Standards Published

S.No	Standards Published			
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 guidance			
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			

S.No	Standards Published
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

b) Standard Under Development

S.No	Standard Under Development
1	ISO/CD 21928-2
	Sustainability in buildings and civil engineering works — Sustainability indicators — Part 2: Framework for the development of indicators for civil engineering works
2	ISO/DIS 21931-1
	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 1: Buildings
3	ISO/FDIS 22057
	Sustainability in buildings and civil engineering works – Data templates for the use of EPDs for construction products in BIM

ANNEX 7

(Item 6.1) KEY STANDARDIZATION AREAS PERTAINING TO CED IN SNAP

Sector	Field	Subject Area	Priority
	Accessibility	Universal design for accessibility	3.00
		Aggregate testing	2.60
		Bamboo products	2.60
		Builder's Hardware including Telescopic ball bearing slide, Stainless steel door stopper, Handrails and Panic hardware	2.60
		Cement, Pozzolana and Dry-Mix Mortar	2.60
		Cladding Materials	2.40
		Concrete and concrete products	2.00
		Geo-polymer concrete products	2.60
		Glass Fibre Reinforced Gypsum Panel	2.60
Building and		Grouting Materials	2.60
Construction		Plastic and aluminium doors and Windows	2.40
		Plastic Pipes	2.20
	Construction	Good construction practices	2.40
	Disaster Mitigation	Cyclone Resistant design of structures	2.00
		Earthquake Zoning, Design and Post- earthquake structural rehabilitation	2.00
		Landslide Hazard Control, zoning and risk assessment	2.00
		Fire Fighting Equipment	2.00

Sector	Field	Subject Area	Priority
	Fire Safety	Fire Resistance Rated Building Component	3.20
	Housing	Affordable Housing	1.50
		New/Innovative Building Materials and Technologies	1.50
		Prefab construction	1.50
	Restoration and Maintenance of Heritage Structures	Maintenance of stone masonry and heritage & other structures	1.50
		Design Codes for Plain and reinforced concrete, Steel and Composite construction	1.50
	Structural Safety	Liquid retaining structures, Tall buildings, Cooling towers, Bins/Silos, Baffle walls	1.50
		Machine foundation design and Pile foundation testing	1.50
		Safety during construction	1.50
	Sustainability	Sustainable Water Supply and Sanitation	2.60
Urban development	Smart Cities	Smart and sustainable habitat	1.50

Note: In the priority indicated for the subject areas in the above table, a lower value indicates a higher priority.