BUREAU OF INDIAN STANDARDS

AGENDA

Panel for Administration, Development Control Rules

and General Building Requirements, CED 46:P1

: Sixth Meeting

Thursday, 18 January 2024

: 1030 h

Mimaansa (White room), Manak Bhavan, Bureau of Indian Standards, 9 Bahadur Shah Zafar Marg, New Delhi 110 002

Convener: Shri V. Suresh Member Secretaries : Shri Arun Kumar S

Smt Madhurima Madhav

Item 0 OPENING REMARKS

Item 1 CONFIRMATION OF MINUTES OF THE LAST MEETING

1.1 The Minutes of the fifth meeting of the Panel held on 31 October 2023 in New Delhi, were circulated vide BIS DG letter No. CED 46:P1/A-2.5 dated 17 January 2024.

The Panel may **CONFIRM** the Minutes

Item 2 COMPOSITION

2.1 The present composition of the Panel for Administration, Development Control Rules, and General Building Requirements, CED 46:P1, as reconstituted by the National Building Code Sectional Committee, CED 46 is given at **Annex 1 (P-3)**.

The Panel may **NOTE**.

Item 3 PROJECT OF REVISION OF NBC

3.1 Under the project of Revision of NBC, various Parts/Sections of NBC 2016 [a list of which given in **Annex 2 (P-6)**] are being comprehensively revised, with a view to bring out a most modern and state-of-the-art revision of the Code.

The Panel may consider revising the chapter taking into cognizance the latest development in the field. In the revision exercise due consideration may be given for ensuring coherence among various chapters of the Code. Where required, suggestions for improvements in the other chapters of the code may also be provided.

The Panel may **NOTE**

3.2 The Panel may therefore engage in a high-level review of the existing chapters covering Administration, Development Control Rules, and General Building Requirements. The contents of existing Part 2 'Administration' and Part 3 'Development Control Rules, and General Building Requirements' are given respectively in **Annex 3 (P-8)** and **Annex 4 (P-10)**. This review may involve an examination of the structure, content, and alignment of the chapters with current industry standards and practices.

The Panel may **NOTE**

Item 4 COMMENTS RECEIVED ON PART 2 'ADMINISTRATION' OF SP7: 2016

4.1 Comments received on the above Chapters of NBC 2016 are given at **Annex 5** (P-12).

The Panel may **CONSIDER**.

Item 5 COMMENTS RECEIVED ON PART 3 'DEVELOPMENT CONTROL RULES, AND GENERAL BUILDING REQUIREMENTS' OF SP7: 2016

5.1 Comments received on the above Chapters of NBC 2016 are given at **Annex 6** (P-15).

The Panel may **CONSIDER**.

Item 6 DATE & PLACE OF THE NEXT MEETING

Item 6 ANY OTHER BUSINESS

ANNEX 1 (*Item* **2.1**)

Composition of the Panel for Administration, Development Control Rules and General Building Requirements, CED 46:P1

SI No.	NAME OF THE ORGANISATION	REPRESENTED BY
1)	In Personal Capacity, Thiruvananthapuram	Shri V. Suresh (<i>Convener</i>)
2)	Airports Authority of India, New Delhi	Nomination Awaited
3)	Association of Consulting Civil Engineers (India), Bangalore	Shri Avinash D. Shirode Shri Umesh B. Rao (Alternate)
4)	Building Materials and Technology Promotion Council, New Delhi	Dr Shailesh Kr Agrawal
5)	Central Public Works Department, New Delhi	Shri A.K. Sharma Shri Saju Siddharthan (Alternate)
6)	Confederation of Real Estate Developers Associations of India, New Delhi	Shri Nilam B. Doshi Shri Nikhil Hawelia (Alternate)
7)	Consulting Engineers Association of India, New Delhi	Shri S. C. Mehrotra Shri V. P. Agarwal (Alternate)
8)	Corporation of Chennai, Chennai	Shri R. Manoharan Shri A. S. Murugan (Alternate)
9)	Council of Architecture, New Delhi	Shri Divya Kush Shri A. R. Ramanathan (Alternate)
10)	CSIR - Central Building Research Institute, Roorkee	Prof. R. Pradeep Kumar Dr Achal Kumar Mittal (Alternate)
11)	Delhi Development Authority, New Delhi	Shri Ajay Kumar Agrawal Shri Manohar Lal (Alternate)
12)	Engineering Council of India, New Delhi	Dr Mahesh Tandon Dr S. Chatterjee (Alternate)
13)	Ghaziabad Development Authority, Ghaziabad	Nomination Awaited
14)	Housing and Urban Development Corporation Ltd, New Delhi	Ms Pooja Nandy Smt Nirmal Batra (Alternate I) Md. Ishteyak Alam (Alternate II)

15)	Indian Association of Structural Engineers, New Delhi	Shri Manoj K. Mittal Prof Mahesh Tandon (Alternate)
16)	Indian Building Congress, New Delhi	Shri Rajeev Kumar Gupta Shri Nawal Kishore Singh (Alternate)
17)	Institute of Town Planners (India), New Delhi	Dr S. K. Kulshrestha
18)	Ministry of Environment, Forest and Climate Change, New Delhi	Nomination Awaited
19)	Municipal Corporation of Greater Mumbai, Mumbai	Chief Engineer (Dev Plan) Dy Chief Engineer (Dev Plan)-I (Alternate)
20)	National Council for Cement and Building Materials, Ballabgarh	Shri P. N. Ojha Shri Amit Trivedi (Alternate)
21)	National Real Estate Development Council, New Delhi	Nomination Awaited
22)	National Monuments Authority, New Delhi	Shri Bhaskar Verma Col Savyasachi Marwaha (Alternate)
23)	School of Planning and Architecture, New Delhi	Prof Mandeep Singh Prof P. S. N. Rao (Alternate)
24)	South Delhi Municipal Corporation, New Delhi	Shri Sudhir Mehta Shri Brajesh Kumar (Alternate)
25)	Svayam - Global Centre for Inclusive Environments, New Delhi	Shri Navin Kumar Nayan
26)	The Energy and Resources Institute, New Delhi	Nomination Awaited
27)	The Indian Institute of Architects, Mumbai	Shri Akshaya Kumar Beuria Shri Envita Das (Alternate) Shri Dhanashri Bhosale (Alternate II)
28)	The Institution of Engineers (India), Kolkata	Shri Ashok Kumar Basa Shri P. Surya Prakash (Alternate)
29)	Town and Country Planning Organization, New Delhi	Shri R. Srinivas

30)	West Bengal Housing Infrastructure Development Corporation Limited, Kolkata	Chief Planner Additional Chief Planner (Alternate)
31)	In Personal Capacity, Mumbai	Shri Shashikant L. Jadhav
32)	In Personal Capacity, Visakhapatnam	Dr V S Naidu
33)	In Personal Capacity, New Delhi	Shri Subhash Chandra Vashishth

ANNEX 2 (*Item* **3.1**)

Details of Chapters in the NBC 2016

Part/Section	Title		
1 PART 0	INTEGRATED APPROACH – A PRE-REQUISITE FOR APPLYING THE PROVISIONS OF THE CODE		
2 PART 1	DEFINITIONS		
3 PART 2	ADMINISTRATION		
4 PART 3	DEVELOPMENT CONTROL RULES AND GENERAL BUILDING REQUIREMENTS		
5 PART 4	FIRE AND LIFE SAFETY		
6 PART 5	BUILDING MATERIALS		
7	Section 4 Masonry Section 5 Concrete Section 5 Plain and Reinforced Concrete Section 5 Prestressed Concrete		
18 PART 7	CONSTRUCTIONAL PRACTICES AND SAFETY		
PART 8 19 20 21 22 23 24	BUILDING SERVICES Section 1 Lighting and Ventilation Section 2 Electrical and Allied Installations Section 3 Air-conditioning, Heating and Mechanical Ventilation Section 4 Acoustics, Sound Insulation and Noise Control Section 5 Installation of Lifts and Escalators and Moving Walks 5A Lifts 5B Escalators and Moving Walks		
25	Section 6 Information and Communication Enabled Installations		

PART 9 26 27 28 29	PLUMBING SERVICES Section 1 Water Supply Section 2 Drainage and Sanitation Section 3 Solid Waste Management Section 4 Gas Supply
PART 10 3031	LANDSCAPING, SIGNS AND OUTDOOR DISPLAY STRUCTURES Section 1 Landscape Planning and Design Section 2 Signs and Outdoor Display Structures
32 PART 11	APPROACH TO SUSTAINABILITY
33 PART 12	ASSET AND FACILITY MANAGEMENT

Annex 3 (*Item* **3.2**)

CONTENTS OF PART 2 'ADMINISTRATION' OF NBC 2016

FOREWORD

SECTION 1 GENERAL

- 1 SCOPE
- 2 TERMINOLOGY
- 3 APPLICABILITY OF THE CODE
- 4 INTERPRETATION
- 5 ALTERNATIVE MATERIALS, METHODS OF DESIGN AND CONSTRUCTION, AND TESTS

SECTION 2 ORGANIZATION AND ENFORCEMENT

- 6 DEPARTMENT OF BUILDINGS
- 7 POWER AND DUTIES OF TEAM OF BUILDING OFFICIALS
- 8 BOARD OF APPEALS
- 9 VIOLATIONS AND PENALTIES
- 10 POWER TO MAKE RULES

SECTION 3 PERMIT AND INSPECTION

- 11 DEVELOPMENT/BUILDING PERMIT
- 12 APPLICATION FOR DEVELOPMENT/BUILDING PERMIT
- 13 RESPONSIBILITIES AND DUTIES OF THE OWNER
- 14 INSPECTION, OCCUPANCY PERMIT AND POST OCCUPANCY INSPECTION
- 15 UNSAFE BUILDING
- 16 DEMOLITION OF BUILDING

- 17 VALIDITY
- 18 ARCHITECTURAL CONTROL
- ANNEX A GUIDE FOR THE QUALIFICATIONS AND COMPETENCE OF PROFESSIONALS
- ANNEX B FORM FOR FIRST APPLICATION TO DEVELOP, ERECT, RE-ERECT OR TO MAKE ALTERATION IN ANY PLACE IN A BUILDING
- ANNEX C FORM FOR CERTIFICATE FOR STRUCTURAL DESIGN SUFFICIENCY
- ANNEX D FORM FOR ENGAGEMENT OF BUILDER/CONSTRUCTOR
- ANNEX E FORM FOR SUPERVISION
- ANNEX F FORM FOR SANCTION OR REFUSAL OF DEVELOPMENT/BUILDING PERMIT
- ANNEX G FORM FOR NOTICE FOR COMMENCEMENT
- ANNEX H FORM FOR CERTIFICATE FOR SUB-SURFACE INVESTIGATION
- ANNEX J FORM FOR CERTIFICATE FOR COMPLETED STRUCTURAL DESIGN WORK AS PER STRUCTURAL SAFETY REQUIREMENTS
- ANNEX K FORM FOR CERTIFICATE FOR SUPERVISION OF EXECUTION OF WORK
- ANNEX M FORM FOR CERTIFICATE FOR COMPLETED WORK BY BUILDER/CONSTRUCTOR
- ANNEX N FORM FOR COMPLETION CERTIFICATE
- ANNEX P FORM FOR OCCUPANCY PERMIT

Annex 4 (*Item* **3.2**)

CONTENTS OF PART 3 'DEVELOPMENT CONTROL RULES AND GENERAL BUILDING REQUIREMENTS' OF NBC 2016

FOREWORD

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AREAS

1	SCOPE
2	TERMINOLOGY
3	LAND USE CLASSIFICATION AND USES PERMITTED
4	MEANS OF ACCESS
5	COMMUNITY OPEN SPACES AND AMENITIES
6	REQUIREMENTS OF PLOTS
7	CLASSIFICATION OF BUILDINGS
8	OPEN SPACES (WITHIN A PLOT)
9	AREA AND HEIGHT LIMITATIONS
10	OFF-STREET PARKING SPACES
11	GREENBELTS, LANDSCAPING AND WATER CONSERVATION
12	REQUIREMENTS OF PARTS OR BUILDINGS
13	REQUIREMENTS FOR PLANNING OF PUBLIC BUILDINGS AND SITES AS ACCESSIBLE AND BARRIER FREE FOR ELDERS AND PERSONS WITH DISABILITIES
14	SPECIAL REQUIREMENTS OF LOW INCOME HOUSING
15	SPECIAL REQUIREMENTS FOR CLUSTER PLANNING FOR HOUSING
16	SPECIAL REQUIREMENTS FOR LOW INCOME HABITAT PLANNING IN RURAL AREAS

SPECIAL REQUIREMENTS FOR DEVELOPMENT PLANNING IN HILLY

- 18 FIRE AND LIFE SAFETY
- 19 DESIGN AND CONSTRUCTION
- 20 LIGHTING AND VENTILATION
- 21 ELECTRICAL AND ALLIED INSTALLATIONS (INCLUDING LIGHTNING PROTECTION OF BUILDINGS AND SOLAR ENERGY UTILIZATION)
- 22 AIR CONDITIONING, HEATING AND MECHANICAL VENTILATION
- 23 ACOUSTICS, SOUND INSULATION AND NOISE CONTROL
- 24 HEAT INSULATION
- 25 INSTALLATION OF LIFTS, ESCALATORS AND MOVING WALKS
- 26 INFORMATION AND COMMUNICATION ENABLED INSTALLATIONS
- 27 PLUMBING SERVICES AND SOLID WASTE MANAGEMENT
- 28 SUSTAINABILITY
- 29 ASSET AND FACILITY MANAGEMENT
- 30 MITIGATION OF EFFECTS OF ELECTRO MAGNETIC RADIATION (EMR) IN BUILDINGS AND BUILT SPACES
- ANNEX A OFF-STREET PARKING SPACES
- ANNEX B ANTHROPOMETRICS AND SPECIFIC REQUIREMENTS FOR BARRIER FREE BUILDINGS AND BUILT ENVIRONMENT
- ANNEX C SPECIAL REQUIREMENTS FOR LOW INCOME HOUSING IN URBAN AREAS
- ANNEX D SPECIAL REQUIREMENTS OF CLUSTER PLANNING FOR HOUSING
- ANNEX E SPECIAL REQUIREMENTS FOR LOW INCOME HABITAT PLANNING IN RURAL AREAS
- ANNEX F SPECIAL REQUIREMENTS FOR DEVELOPMENT PLANNING IN HILLY AREAS

LIST OF STANDARDS

ANNEX 5

(Item 4.1)

COMMENTS RECEIVED ON PART 2 'ADMINISTRATION' OF SP7: 2016

SI No	NAME OF THE COMMENTATOR	SUBJECT MATTER	BRIEF OF COMMENTS
1	Superintending Engineer (TAS) Central Public Works Department, New Delhi	List of items pertaining to MoHUA for Annual Action Plan 2024-25 of BIS towards standards development.	
2	Association of Consulting Civil Engineers,(India), Bengaluru	Clarification w.r.t Competence of Civil Engineers of Specialized Post Graduate Qualifications	The term "Engineer" means Civil Engineer or Graduate Civil Engineer whose competence is well defined under Clause A-2.2 ENGINEER. Where as to practice as Structural Design Engineer it is specified to have a 3-Years of experience in structural designs for Graduate Civil Engrs, 2- Years for Post Graduates in Civil Structural Engineering & 1-Year for Doctorates in Structural Engg, etc & it goes on, for other areas of specialisation like Geotechnical Engineers, Town Planners, Plumbing Engineers, etc. However, the Authorities like BBMP in Bengaluru, are not allowed to practice the competence of Engineer or Civil Engineer as per A-2.2 who are registered as Structural Engineers, Plumbing Engineers, Town Planners, etc. This point was asked to BIS during one of the webinars and it was clarified that Structural

SI No	NAME OF THE COMMENTATOR	SUBJECT MATTER	BRIEF OF COMMENTS
			Engineers Competence is "All the Competence of Civil Engineer + the Structural Competence and similarly for other Civil Engg. Specialisations". In spite of our clarifications, the Authorities are not heeding and are preventing the registered Structural, Geotechnical & Plumbing Engineers to practice the competence of a Civil Engineer (defined under clause A-2.2).
			It has become extreme necessary to clarify this point from BIS side so that the authorities will take note of the same & allow the specialised Civil Engineers to practice their mother profession of Civil Engg freely without hindrances.
			In the last 5 th meeting of the Panel held in joint session with CED 46 on 31 October 2023, the following were observed / decided:
			The Committee considered the comments received from Association of Consulting Civil Engineers (India), Bengaluru seeking clarification in respect of provisions of Part 2 'Administration' of the Code in view of the practices adopted by some of the Building Authorities who are preventing the registered Structural, Geotechnical and Plumbing Engineers to practice the competence of a Civil Engineer. In response, the Committee reiterated its decision as taken during the last meeting of the Panel, CED 46:P1 during which it was clarified that

SI No	NAME OF THE COMMENTATOR	SUBJECT MATTER	BRIEF OF COMMENTS
			structural/geotechnical/plumbing engineers, by virtue of their qualification, are competent to do all the works as per the competence prescribed for the engineers. It was also clarified that it would depend upon how a professional is registered with the local body, namely, as Engineer or as Structural Engineer or as geotechnical Engineer or as a Plumbing Engineer, and accordingly, they would be competent to carry out the works as prescribed against the same. It was further clarified that in order to practice as both Civil Engineer and Structural Engineer/Geotechnical Engineer/Plumbing Engineer, they will have to register themselves as both the building professionals. It was decided that in order to avoid any confusion, the above would be clarified in the revision of the Code.

ANNEX 6

(Item 5.1)

COMMENTS RECEIVED ON PART 3 'DEVELOPMENT CONTROL RULES, AND GENERAL BUILDING REQUIREMENTS' OF SP7 : 2016

SI No	NAME OF THE COMMENTATOR	SUBJECT MATTER	BRIEF OF COMMENTS
1	Shri Hanish Arora Dormakaba India Pvt. Ltd.	Dormakaba comments on IS 4963 (Requirement for accessibility in built environment for older adults and persons with disabilities)	The details are given in Annex 6A (4 pages), sent as a separate PDF.
2	Superintending Engineer (TAS) Central Public Works Department, New Delhi	for Annual Action Plan 2024-25 of BIS towards standards	List of items used in works and requiring BIS codes. 1) Design standards for planning and development for hilly and eco sensitive regions 2) Development codes / norms for city core area development 3) Norms standards for developing of TOD's on zones within cities 4) Planning norms and standards for high rising developments: efficient use of land flexibility of use i.e. local area planning and town planning schemes 5) Planning and norms for green field construction 6) Design and standards for station area / Airport / Bus station / Metro station or major multi model transport interchange

3	Shri Ashok B Lal Architects	Draft White Paper: Healthy Affordable Housing in India	For more details on White Paper following url can be accessed https://library.gbpn.org/resource/white-paper-healthy-affordable-housing-india-prioritising-well-being-occupants-design-and
4	Shri H R Ranganath, MAPLE Engg-Design Services (India) Pvt. Ltd	Fire Driveway specifications	 Clause no 4.6(c) and 4.6.1.4 (c) –fire driveway - width& turning radius for different building height to be included. The distance of dive way from building line/edge to be mentioned. Clarity to be indicated for building Entrance area canopy height for movement of fire tender.
5	Shri Aditya Kumar, Consumer, Hyderabad	Minimum clear width	Kindly provide the guideline or specification to be followed in case of minimum clearance to be provided for the door for balcony. I had purchased one apartment in Hyderabad wherein a sliding door was provided to commute to the balcony attached to the room and the space for commuting is very narrow (picture is enclosed). The matter was taken up with the builders several times but we didn't receive any written communication, however they verbally told us that the same can't be changed. Please provide the guideline/regulation if any w.r.t minimum clear door width so that the same may be quoted to the builder and also guide me if the same is not resolved then the appropriate authority to lodge my grievance.

6	Shri Priyadarshan Dixit	Limit of layout planning	Why there is limit of layout planning for civil engineers upto 1ha in urban area and 2 ha in rural area.
			It is really an injustice. Civil engineers are the professional, who deeply

			know the surveying and how to the land can be best used. Please remove the barrier of planning for civil engineers. Civil engineers have no statutory body doesn't mean that, other professionals forcefully make the code in their fevour. Please remove the barrier if it is same as draft in final copy.
7	DR. U.S. CHHILLAR Director General Institution of Fire Engineers (India)	4.6 of Part 3	Please see the details below
		COMMENTS OF IF	<u>E</u>
Clau se No.	Existing provisions	Proposed provisions/ amendments	Justification
4.6	For high rise buildings and special buildings (see Part 4 'Fire and Life Safety' the following additional provisions of means of access shall be ensured.	For high rise buildings and "plots having set back 6m (Front, Rear and sides) and above" the following additional provisions of means of access shall be ensured.	Special buildings mentioned in clause 1.2 of NBC part-IV, starts from 500m ² . In such buildings while providing 6m wide road around the buildings, it will require more than 540m ² area. Plots having 6001m ² area are allowed 6m set back as per NOIDA building bye laws.
			Therefore the fire engine road can be provided in the

	In hilly areas where one or two sides of the buildings sticks with the slope of the hill, the fire engine road should be provided with turning or reverse provisions from the dead end point. Similarly in costal or lakes areas where one or two sides of the buildings are facing the water, the fire engine road should be provided with turning or reverse provisions from the dead end point.	In hilly areas one side of the building is always sticks with the hill slope and in this case there is no scope to provide the fire engine road around the building. A special note for buildings in hilly areas facing back side to the slope of the hill should also be added in the NBC. This can be for three or two sides and there should also be a provision to back or turn the vehicle from dead end. Similarly in costal or lakes areas where the buildings are facing one or sides towards the water sides the provision of fire engine road should be as per the provisions proposed for hilly areas.
The approach to the building and open spaces on all its sides shall be not less than 6m in width and a turning radius of minimum 9 m shall be provided for fire tender movement of fire tenders weighting up to 45 t minimum. For heavier fire tenders the minimum width turning radius and the hard surface capable of taking the	The approach to the building and open spaces on all its sides shall be not less than 6m in width and a turning radius of minimum 9 m shall be provided for fire tender movement of fire tenders weighting up to 45 t minimum. "The width of road for the buildings above 60m in height shall be 7.5m with 12m turning radius." The layout for the open space for fire	Provision of minimum and maximum distance of Fire Tender path from face of the wall needs to be specified clearly in NBC as is done in case of Podium vide clause 4.6.1.4 b). For podium It is taken as 11m and therefore we should also follow such provision for fire tender path with a maximum of 11 m. Spacing/distance of yard hydrants from the face of wall minimum 2m and maximum 15m has been mentioned in IS: 13039 vide clause 4.15. Similarly the spacing/distance of fire engine road is also
	and open spaces on all its sides shall be not less than 6m in width and a turning radius of minimum 9 m shall be provided for fire tender movement of fire tenders weighting up to 45 t minimum. For heavier fire tenders the minimum width turning radius and the hard	the buildings sticks with the slope of the hill, the fire engine road should be provided with turning or reverse provisions from the dead end point. Similarly in costal or lakes areas where one or two sides of the buildings are facing the water, the fire engine road should be provided with turning or reverse provisions from the dead end point. The approach to the building and open should be provided with turning or reverse provisions from the dead end point. The approach to the building and open spaces on all its sides shall be not less than 6m in width and a turning radius of minimum 9 m shall be provided for fire tender movement of fire tenders weighting up to 45 t minimum. The width of road for the buildings above 60m in height shall be 7.5m with 12m turning radius."

fire tender loads shall be as per the requirement laid down by the Fire Department. The layout for the open space for fire tender movement shall be done in consultation with the Chief Fire Officer of the city, which shall be kept free of obstructions and shall be motorable. The compulsory open spaces around the building shall not be used for parking.

tender movement shall be done in consultation with the Chief Fire Officer of the city, which shall be kept free of obstructions and shall be motorable.

"The edge of the road should not be more than 11m from the face of the building."

The compulsory open spaces around the building shall not be used for parking.

required to be specified. The width of road is specified as 6m.

Increase in width should also be mentioned in this clause keeping in view the chassis of different type of chassis being used in Fire Serv ice.

Moreover such chassis should also be available with the particular Fire Service where these widths are applicable. The width of road is increased for the buildings above 60m in height as 7.5m with 12m turning radius. It will meet the requirement of all type fire engines.
