



National Building Code 2016. What's in it for ICT Infrastructure installations ?

Kiran K Katariya

RCDD, CDCS

Volunteer – BICSI INDIA District

Regional Manager at CommScope, Field Application Engineering – West India



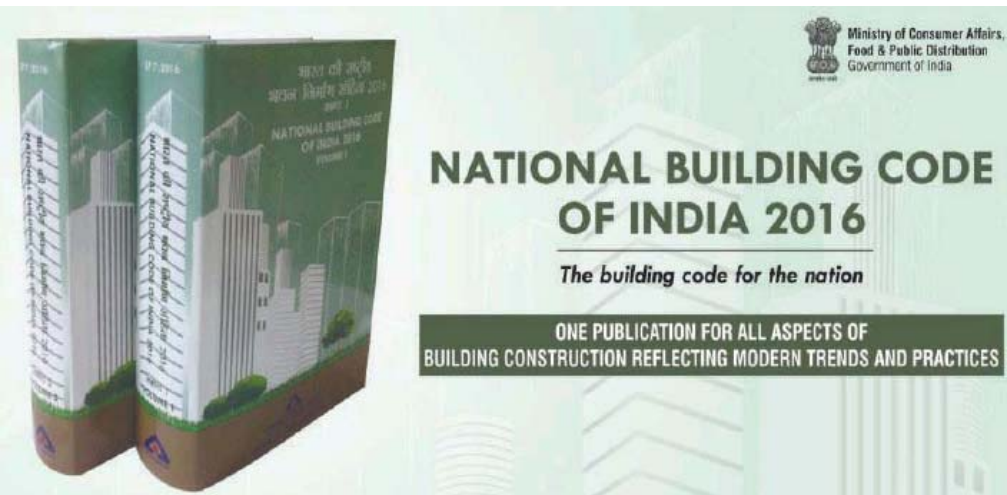
National Building Code of INDIA

- **What is it?**

- A comprehensive building Code, is a national instrument providing guidelines for regulating the building construction activities across the country

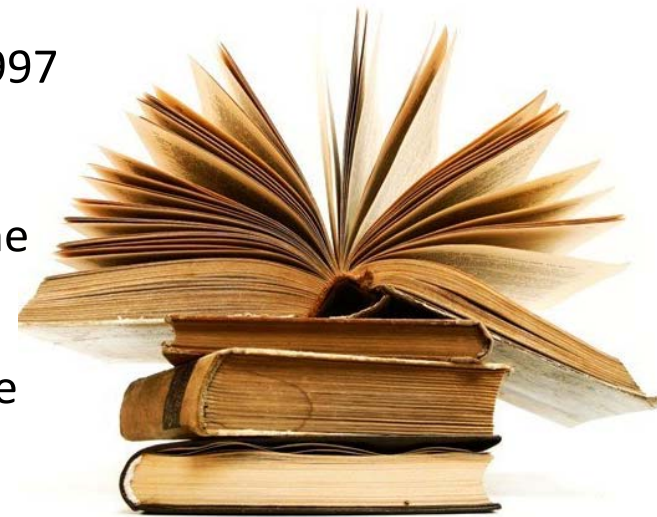
- **What does it Contain ?**

- Administrative regulations, development control rules and general building requirements; fire safety requirements; stipulations regarding materials, structural design and construction (including safety); building and plumbing services; landscape development, signs and outdoor display structures; guidelines for sustainability, asset and facility management, etc.



A Brief History

- **Then**
 - The Code was first published in 1970
 - First revised in 1983.
 - Three major amendments were issued, 2 in 1987 & 3rd in 1997
 - Second revision was in 2005, amendments issued in 2015.
- **Now**
 - A Project for comprehensive revision was taken up under the aegis of the NBC Sectional Committee, CED 46 of BIS
 - 22 expert Panels; around 1000 experts
 - The revision has been brought out as National Building Code of India 2016
 - Reflects the state-of-the-art and contemporary applicable international practices
 - The Code has been formally released and is now available in public domain



NBC 2016. A paradigm shift

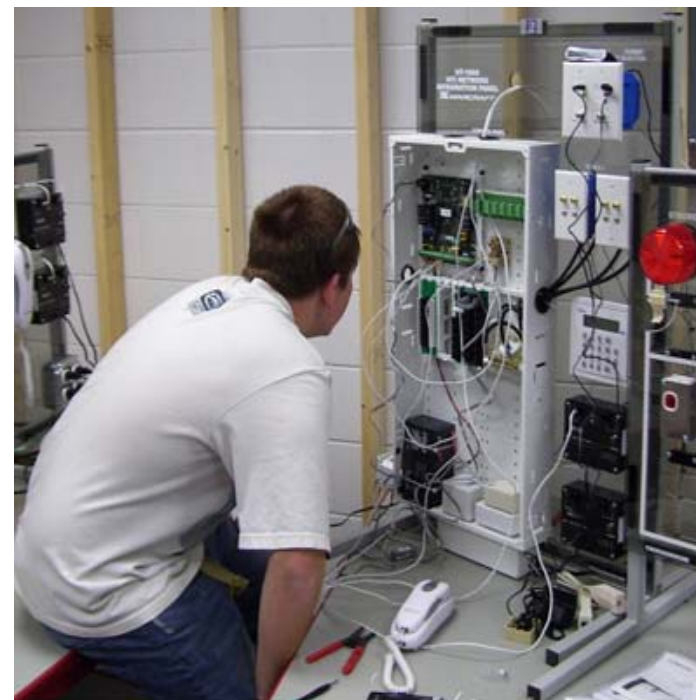
- **Changing building construction activities**
 - Changing nature of occupancies: high rises and mixed
 - Greater dependence and complicated nature of building services
 - New/innovative construction materials and technologies
 - Greater need for preservation of environment
 - Recognition of need for planned management of existing buildings and built environment,
- **Reflection in NBC 2016**
 - Addition of a new chapter on information and communication enabled installations in buildings
 - PART 8 - BUILDING SERVICES
 - Section 6 - Information and Communication Enabled Installations



Contribution by Ninad Desai for inputs as an expert of ICT

Part 8 - Section 6

- **Information and communication based Installations**
 - ICT and cabling installations in a building
 - Covers the basic design and integration requirements for telecommunication spaces within building along with cabling infrastructure, pathway components and passive connectivity hardware.
 - Includes,
 - General requirements relating to installation of communication equipments
 - Cable terminations and power connections
 - General guidelines for planning and providing ICT services in the building at the planning and execution stages.



Part 8 - Section 6

General Requirements

- Accessibility
- Acoustic noise levels
- Administration
- Cable separation
- Ceilings
- Conduits, trays, slots, sleeves and ducts
- Dust and static electricity
- Electrical power
- Prevention from flooding
- Lighting
- Location
- Environmental control
- Fire protection
- Bonding and grounding

Space Allocation

- Equipment Room
- Telecommunication Rooms
- Entrance Facilities



Part 8 - Section 6

Media & Connecting Hardware

- Media selection
- Link identification
- Pathway capacity
- Topologies
- Backbone pathways considerations
- Horizontal distribution
- Open office cabling
- Centralized cabling

Specific

- Telecommunications Bonding and Grounding
- Installation and Workplace Safety

Other Applications

- Electronic access control
- Video Surveillance

Two Sides of the Building Code Argument

Against the Code

Bare Minimum Standards

Shortage of Skills

Safety Over Quality

Supports the Code

Learning From Mistakes

Energy Innovations

Long-Term Impact



There are simple ways to correct the facts, improve the skills and satisfy the important purpose that the Code serves

It's all about Awareness

Stricter Training, Testing and Skill Set development

More Accountability for Customers

Equipped Installers and Integrators

Building Code for the Future

Implementing our current National Building Code will require an awareness & understanding in the way Customers, Consultants and Integrators think & decide about ICT installations

Summary

- The NBC 2016 is now far more demanding for ICT installations than ever before
 - This new chapter brings to us more bandwidth and higher speeds to meet our ever growing data demands.
- The ICT installation practices & testing solutions also need to evolve to meet the challenges of these new code requirements that are being introduced.



Thank You!

