What's in it for ICT Infrastructure installations?

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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

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<th>Stricter Training, Testing and Skill Set development</th>
<th>More Accountability for Customers</th>
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<td>Equipped Installers and Integrators</td>
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<td>Building Code for the Future</td>
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<td>Implementing our current National Building Code will require an awareness &amp; understanding in the way Customers, Consultants and Integrators think &amp; decide about ICT installations</td>
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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!