

Data Centre Infrastructure Standards – EN 50600 Series

Rob Cardigan

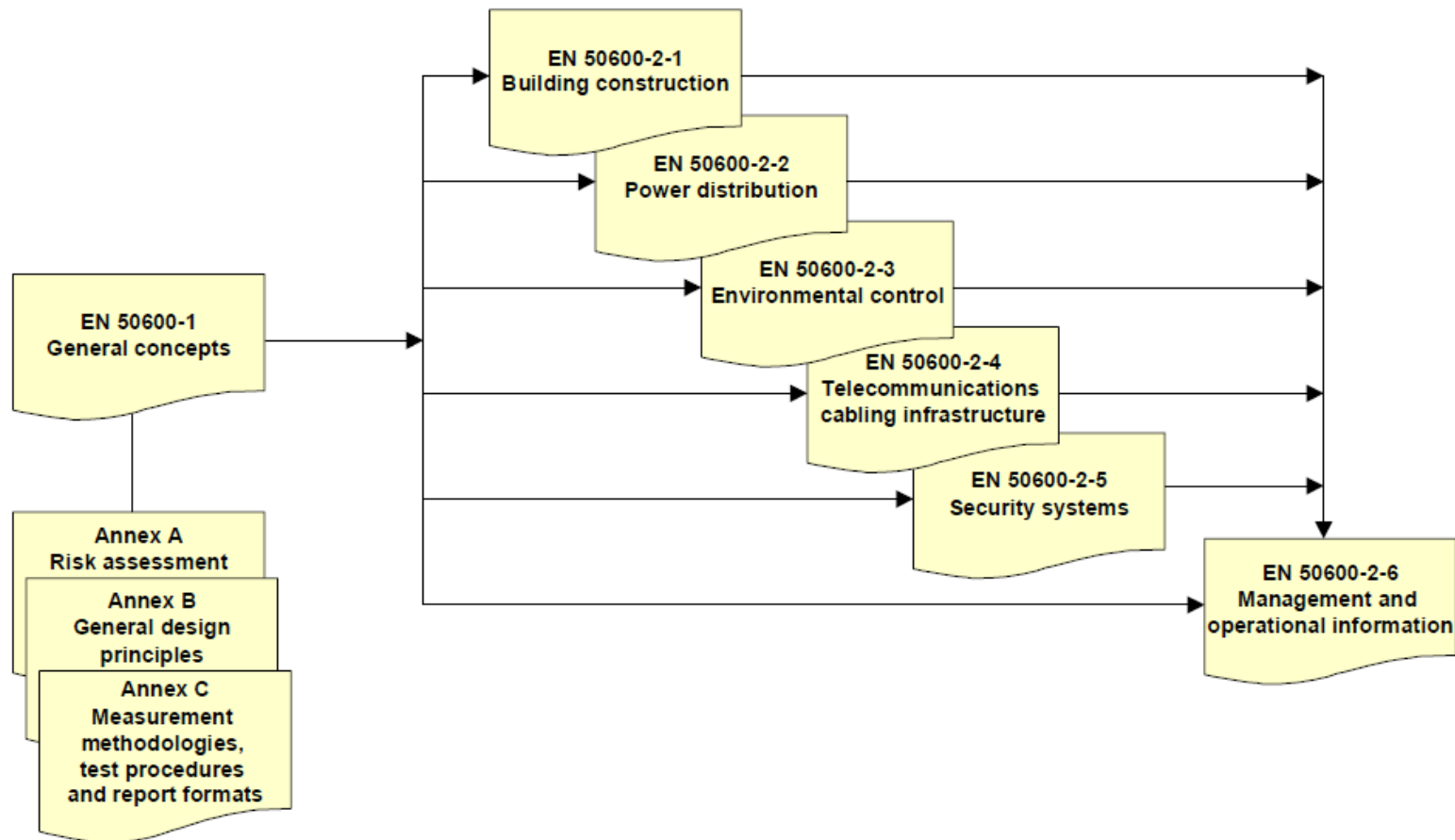


Nexans Cabling Solutions

 Nexans

- Chairman TCT7/-/3
 - Infrastructure Standards
- UK Expert TC 215 WG3
 - EN 50600 Series
- Secretary TCT7/-/1
- Member TCT7/-/2





◆ General Concepts

■ Defines:

- Common aspects, terminology, reference models (functional elements and accommodation) addressing size and complexity

■ Describes:

- Facilities and infrastructures to support effective operation



◆ General Concepts

■ Specifies:

● Classification system based on three key aspects

- Availability
- Security
- Energy Efficiency Enablement



◆ Annexes

■ Detail:

- Issues to be addressed in assessing business risk vs cost allowing data centre to be classified

■ Describe:

- General design principles

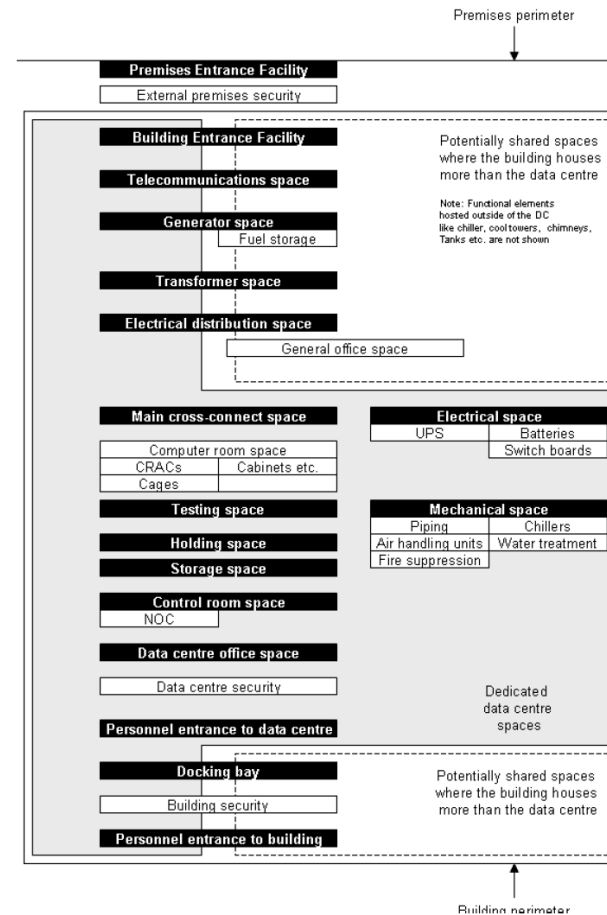
■ Specify:

- Measurement methods and monitoring requirements to support effective management



◆ Spaces:

- Entrance Facilities
- Telecoms Space
- Generator Space
- MCC Space
- Office
- Testing etc



- ◆ Availability
 - Currently 5 levels
 - 2-3 weeks downtime PA
 - 90 h
 - 9 h
 - 1 h
 - 5 min
 - Don't panic – under review 😊
- ◆ ***“percentage of time (or equivalent measure) during which the facilities and infrastructures of the data centre provide functional capability of the data centre.”***



- ◆ Security
 - Zoning Concept
 - 0 Publicly Accessible
 - 1 Pre-selected
 - 2 Security
 - 3 Enhanced security



- ◆ Energy Efficiency Enablement
 - Three levels
 - Global
 - Specific infrastructures
 - Granular



◆ Risk assessment

■ Risk = C * P

- Risk from Annex A is combination of Availability and Security
- Cost determines EEE



- ◆ Power Distribution
 - Editor Mike Gilmore
 - First draft commenced
- ◆ Addresses:
 - Energy sources
 - Distribution
 - Emergency lighting
 - Earthing and bonding
 - ESD
 - Monitoring interfaces



◆ Loads

■ 3 types

- Non-critical loads
- Critical loads – direct feed
- Critical loads – fed by PDU

◆ Range

- All non-critical
- Critical equipment fed by multiple UPS paths



- ◆ Environmental Control
 - Editor Rob Cardigan
 - First draft commenced
- ◆ Addresses
 - Cooling control methods (room & rack)
 - Ventilation control methods and systems;
 - Humidity control methods and systems;
 - Floor layout and equipment locations;
 - Energy saving practices;
 - Operational monitoring, control



- ◆ Secretariat Enquiry Versions of:
 - EN 50600-1
 - EN 50600-2-1
 - EN 50600-2-2
 - EN 50600-2-3
 - Requested for End November with comments in December
 - Review in January meeting of TC 215 WG3



QUESTIONS?

