

# Commissioning is Finally Here

## So What is the Impact?

### NFPA 3

*Recommended Practice  
for Commissioning and Integrated Testing  
of Fire Protection and Life Safety Systems*

# What is NFPA 3?

## Scope.

This document provides the procedures, methods and documentation for commissioning and integrated testing of active and passive fire and life safety systems and their interconnections with other building systems.

## Purpose

To describe the Cx process and integrated testing to ensure that systems perform in conformity with their design intent.



# Goals & Objectives

- Documentation of:
  - Owners Project Requirements (OPR)
  - Basis of Design (BOD)
  - Systems installed as required
  - Performance and documentation of integrated testing
  - As-built drawings & O&M's!
  - Training
  - IT&M



# What is Commissioning?

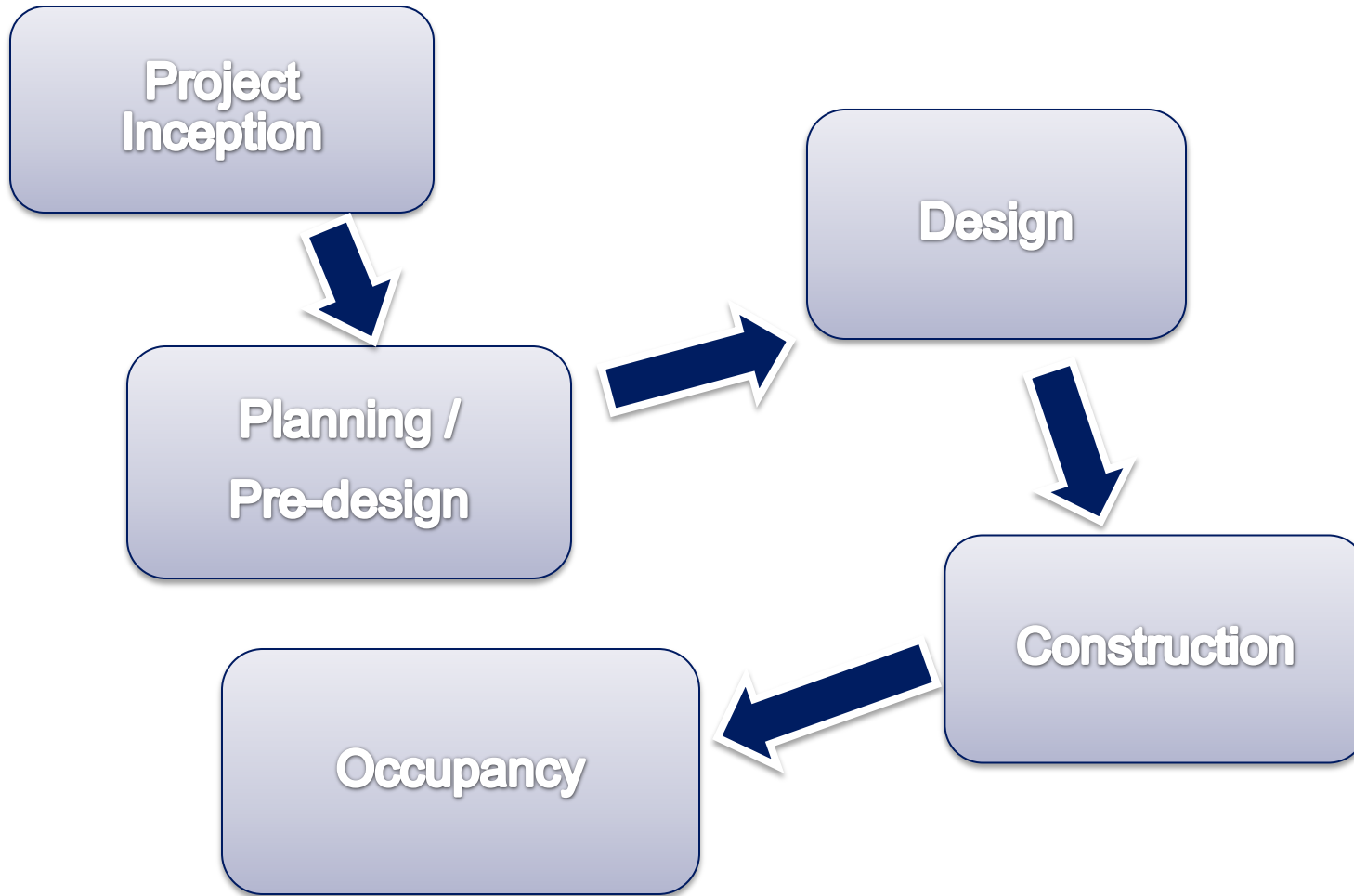
- **3.3.3.1\* Commissioning (C<sub>x</sub>).**
  - A systematic process that provides documented confirmation that specific and interconnected systems function according to the intended design.

# What is Commissioning?

- Quality Assurance / Quality Control
- Best Practice
- Project Management
- Administrative Program

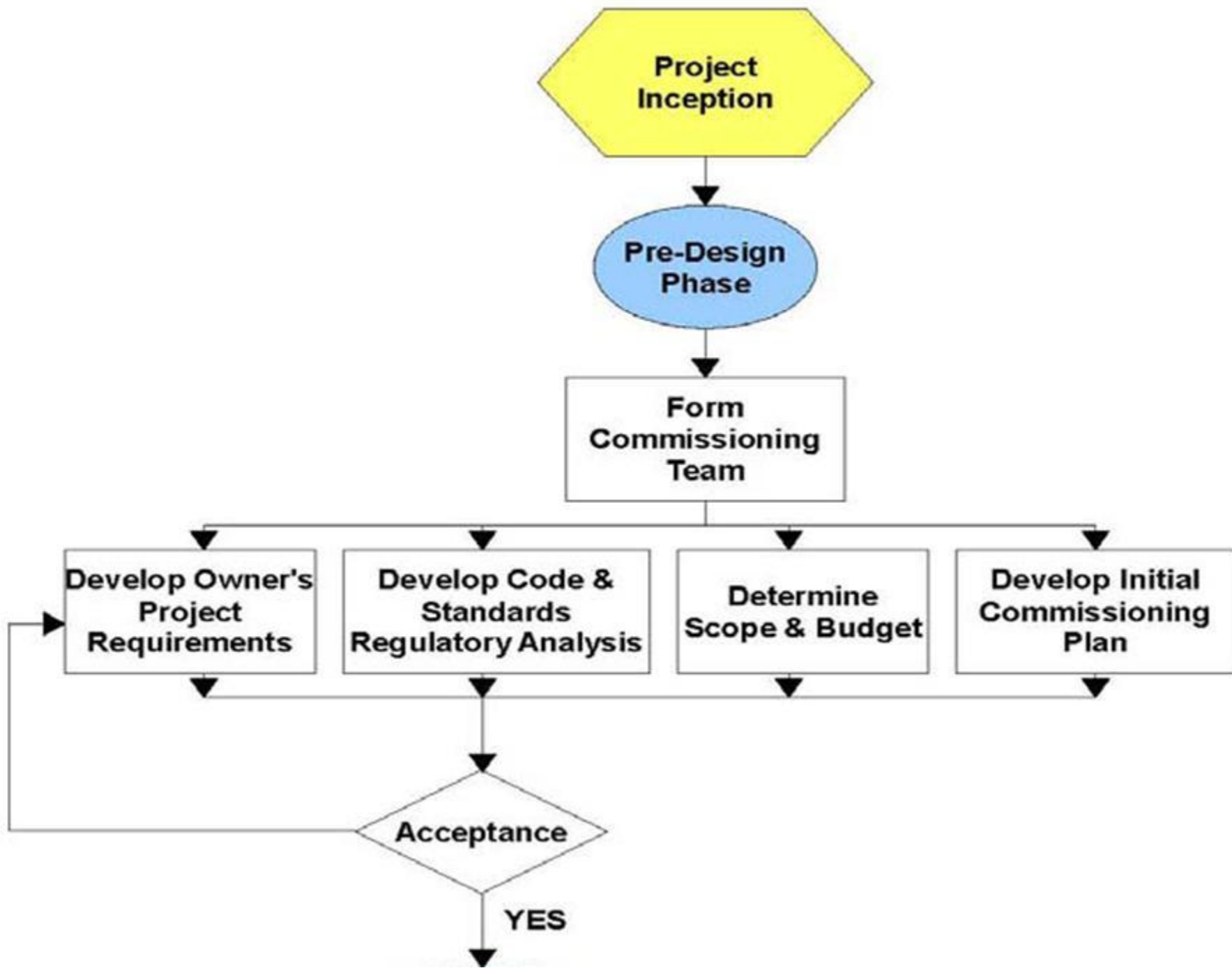


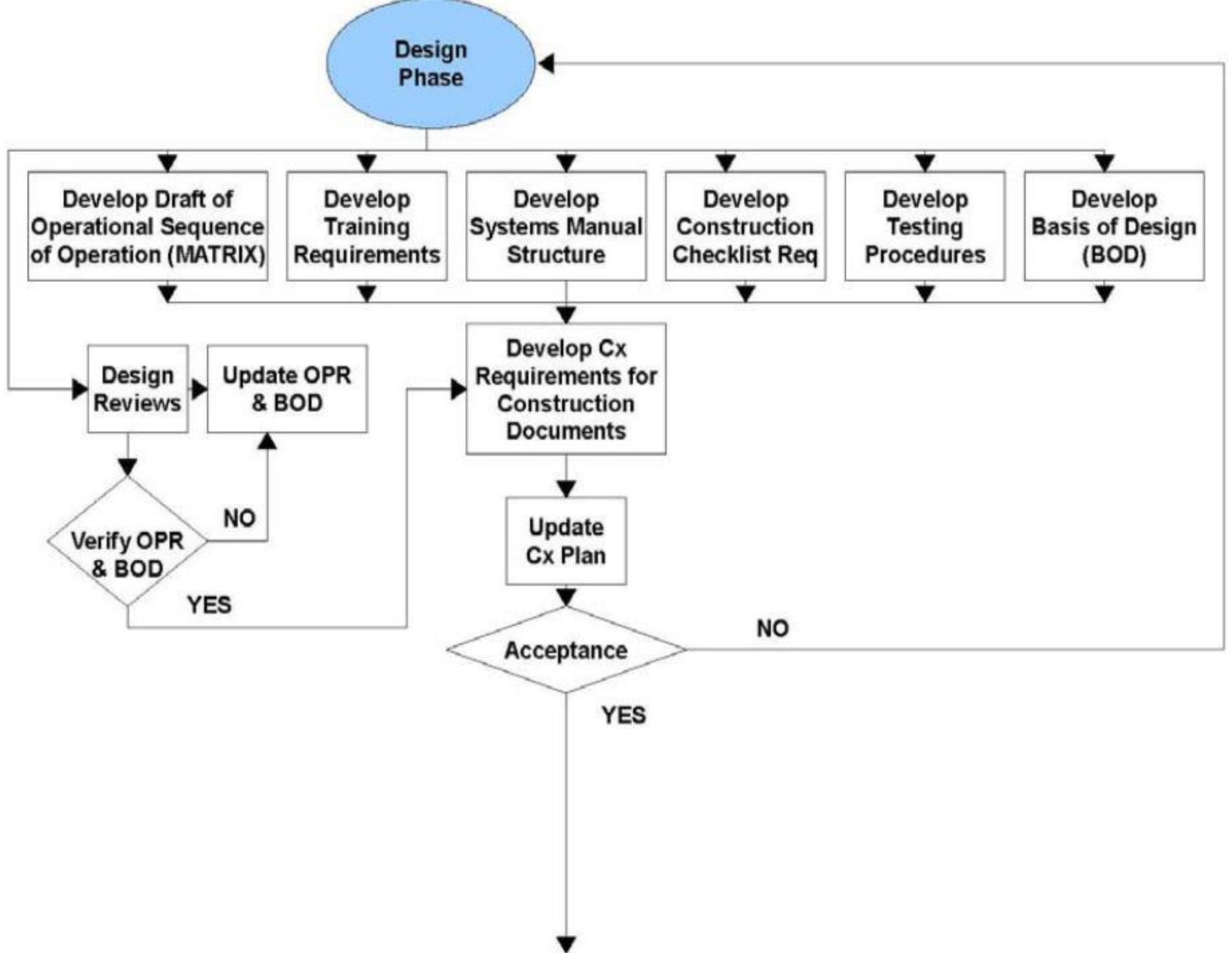
# The Process in NFPA 3

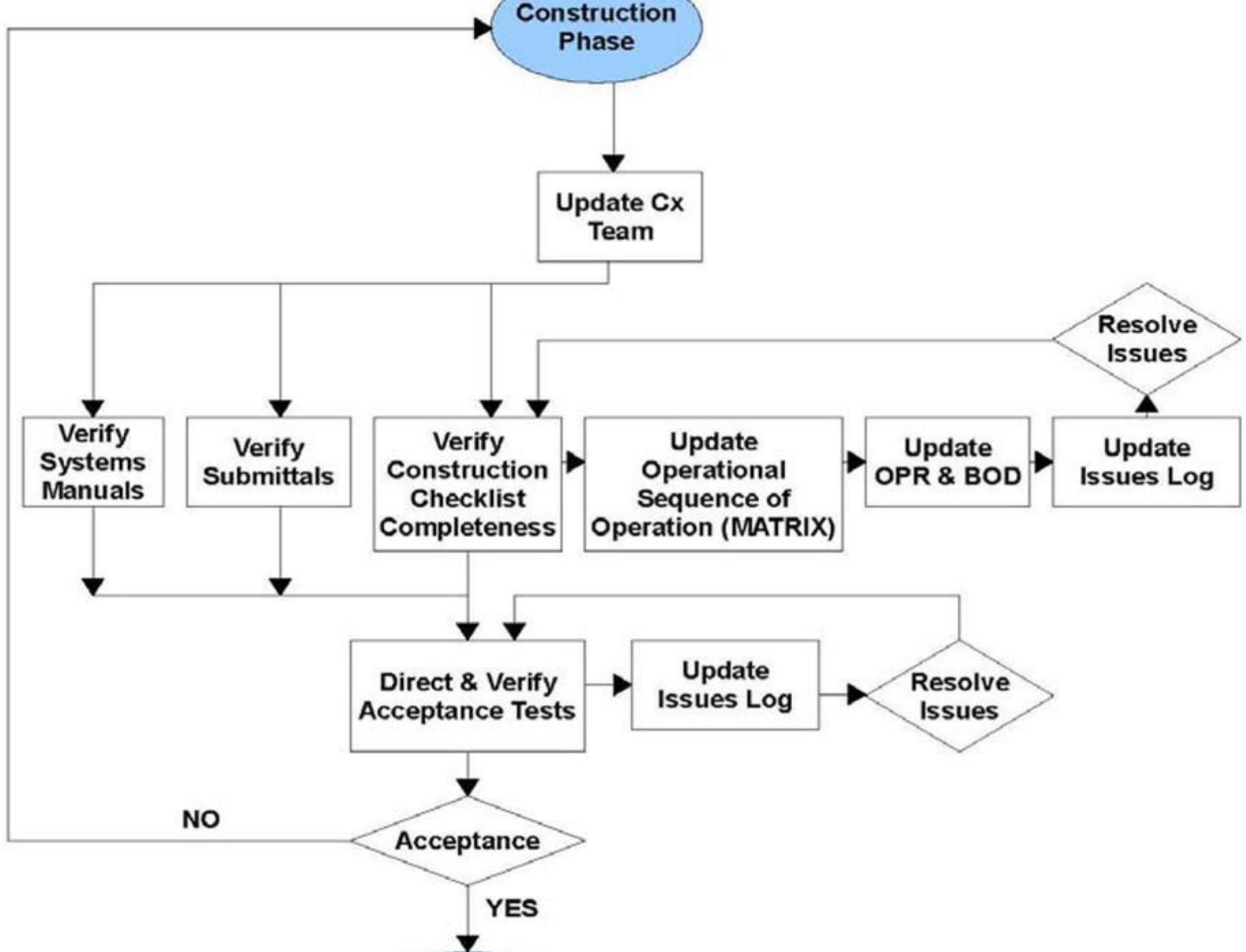


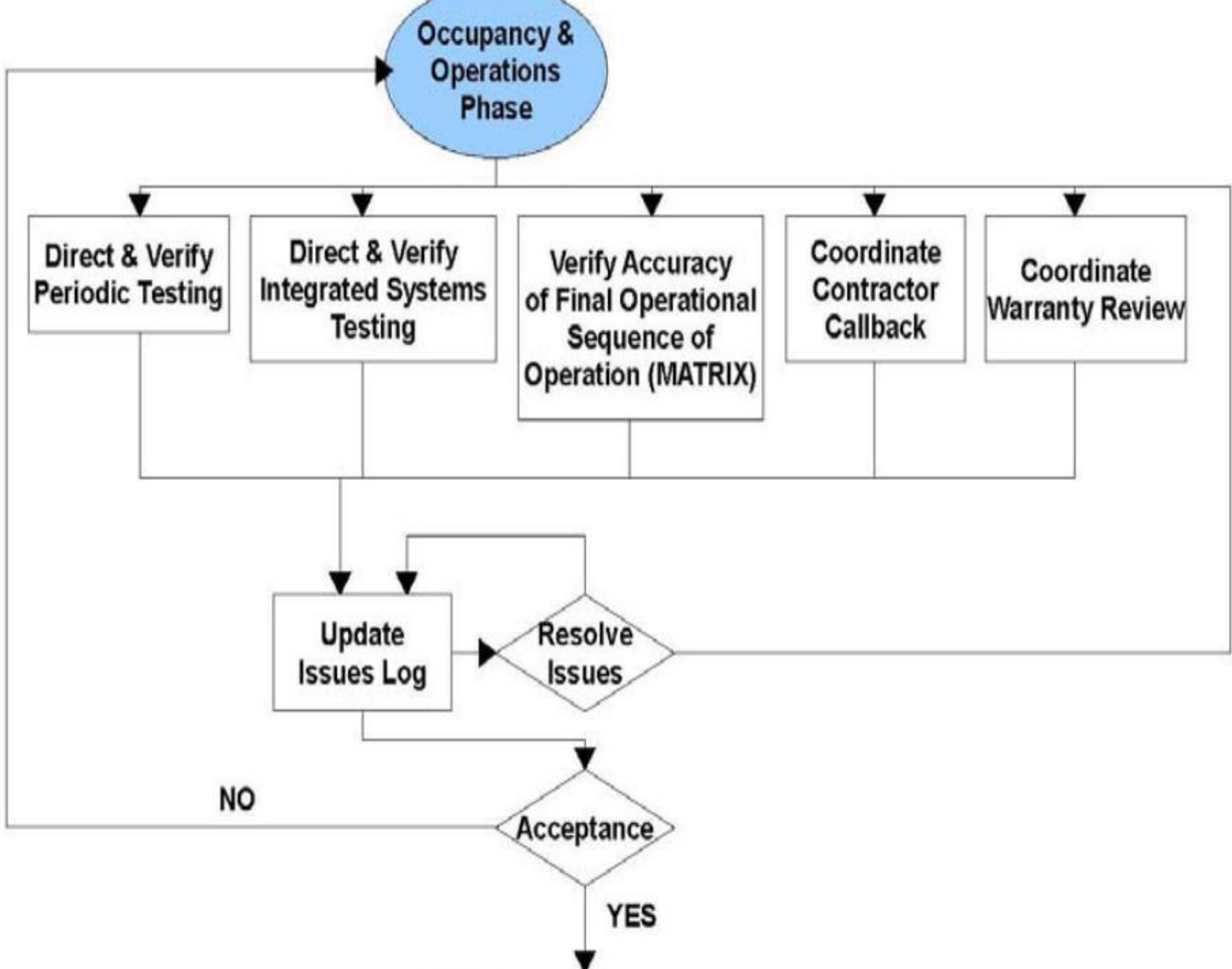
# Owner's Project Requirements (OPR)

- **5.2.3.1** The OPR should form the basis from which all design, construction, acceptance and operational decisions are made.
- **5.2.3.2\*** The OPR should be developed with input from the Owner and all key facility users and operators.









# Cx Team

- (1) Owner
- (2) Commissioning Authority
- (3) Fire Commissioning Agent (FCxA)
- (4) Installation Contractor(s)
- (5) Manufacturer's Representatives
- (6) Registered Design Professional(s)
- (7) Construction Manager/General Contractor
- (8) Owner's Technical Support Personnel
- (9) Facility Manager or Operations Personnel
- (10) Insurance Representative
- (11)\* AHJ



# Installation Contractor

- (1) Include all Commissioning Process requirements and activities in the scope of services.
- (2) Attend required Commissioning Team meetings.
- (3) Include Commissioning Process milestones in the project schedule.
- (4) Implement the training program as required by the Contract Documents.
- (5) Provide submittals to the RDP, Owner and Commissioning Team.
- (6) Develop individual system test plan, including acceptance and integrated testing.
- (7) Notify the General Contractor and FCxA when systems are ready for testing.
- (8) Demonstrate the performance of the systems, including integration.
- (9) Complete the Construction Checklists as the work is accomplished.
- (10) Continuously maintain the Record Drawings as required by the Construction Documents.



# Re-Cx, and RCx

- Re-commissioning (Re-Cx)
- Retro-commissioning (RCx).
  - active and passive fire protection and life safety systems where installed in existing structures.

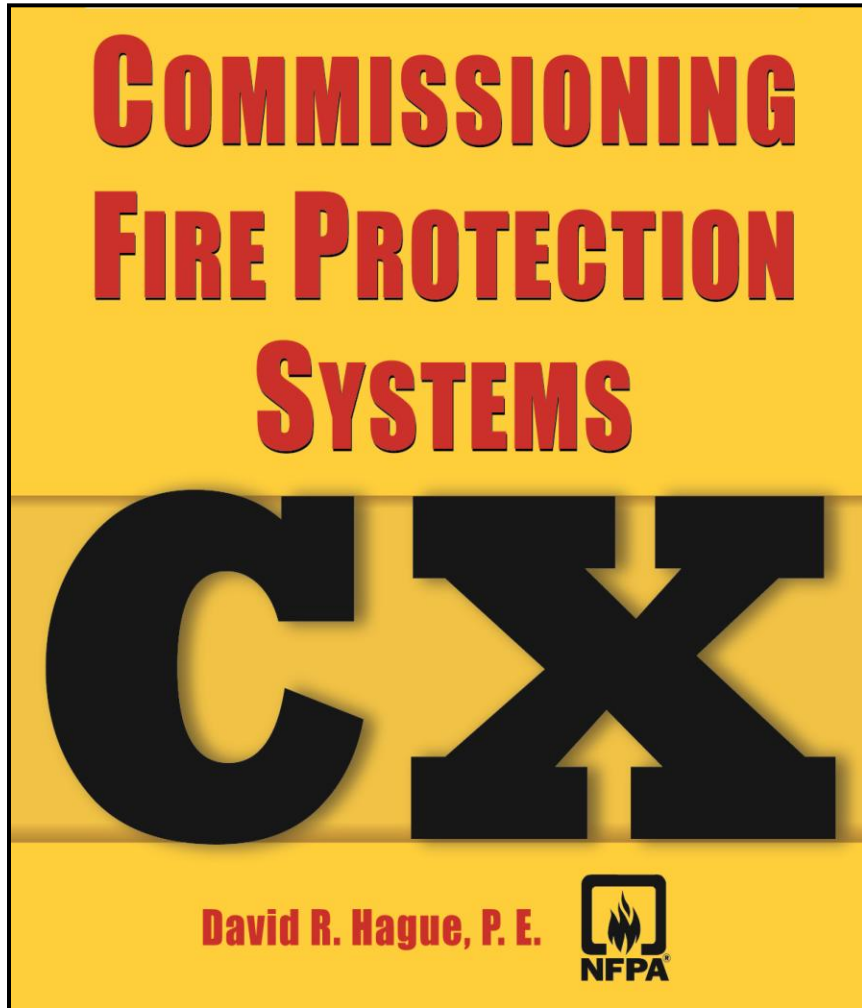


# C<sub>x</sub> Documentation

- **10.1** Approved commissioning documents and forms should be used to record commissioning and integrated testing of fire and life safety systems.
- **10.2** BOD documents referenced in NFPA and other installation standards should be utilized.



# Other Sources



- [www.nibs.org](http://www.nibs.org)
- [www.wbdg.org](http://www.wbdg.org)
- [www.bcxa.org](http://www.bcxa.org)
- [www.peci.org](http://www.peci.org)



# Thank You!

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