



BIM Management: ISO 19650, BIM Execution Plans and Model Coordination



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Introduction:

BIM management breaks down when clients issue vague information requirements, delivery teams model to different conventions and nobody owns the common data environment, so federated models clash late and handover data arrives unusable. This Core Concept course equips project, design and construction managers and BIM coordinators to run information management under the ISO 19650 series: requirements, BIM execution plans, CDE workflows, level of information need, federation and clash detection, 4D and 5D use and asset data handover. Participants draft a BIM Execution Plan with an information delivery and federation strategy for a live project.

Course Objectives:

- Assess an organisation's BIM maturity and define the BIM manager, coordinator and information manager responsibilities a project needs
- Translate organisational, asset and project information requirements into exchange information requirements for an appointment
- Prepare a BIM execution plan and task and master information delivery plans that meet the appointing party's requirements
- Operate common data environment workflows with information states, status codes and approval steps
- Coordinate federated discipline models through clash detection, issue tracking and 4D and 5D model use
- Plan asset information handover using COBie and IFC deliverables and measure BIM adoption with delivery KPIs

Target Audience:

- Managers responsible for delivering building and infrastructure projects that require model-based information exchange
 - Design managers responsible for coordinating architectural, structural and building services design teams
 - Construction managers responsible for turning coordinated models into sequencing, quantities and site information
 - Model coordination leads responsible for federation, clash detection and model quality checks
 - Client-side information leads responsible for setting information requirements and accepting deliverables
 - Digital delivery leads responsible for BIM standards, CDE administration and adoption across a portfolio
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Course Outline:

Day 1: BIM Concepts, Maturity Levels and Delivery Roles

- BIM Definitions: Object-Based Models, Graphical and Non-Graphical Information
- BIM Maturity Levels 0 to 3: From CAD Drawings to Integrated Shared Models
- BIM Dimensions: 3D Geometry, 4D Time, 5D Cost and 6D Operations
- BIM Manager, BIM Coordinator and Information Manager Role Definitions
- BIM Capability Assessment Grid for the Participant Organisation

Day 2: ISO 19650 Information Management Framework

- ISO 19650 Series Structure: Parts 1 to 6 and Their Scope
- Information Requirements Hierarchy: OIR, AIR, PIR and EIR
- Appointing Party, Lead Appointed Party and Appointed Party Responsibilities
- Delivery Team Mobilisation and Capacity Review Under ISO 19650-2
- Information Delivery Planning: MIDP, TIDP and Responsibility Matrix

Day 3: BIM Execution Plans, CDE Workflows and Level of Information Need

- Pre-Appointment and Post-Appointment BIM Execution Plan Structure
- Information Standard and Production Methods: File Naming, Classification and Shared Coordinates
- Common Data Environment States: Work in Progress, Shared, Published and Archived
- CDE Status Codes, Revision Control and Approval Workflow
- Level of Information Need Matrix: Geometry LOD, Alphanumeric Information LOI and Documentation

Day 4: Model Federation, Clash Detection, 4D, 5D and Information Security

- Federated Model Assembly: Discipline Models, Model Origin and Pre-Federation Checks
- Clash Detection Tests: Hard, Clearance and Workflow Clashes With a Clash Issue Log
- 4D Construction Sequencing: Linking Model Elements to Programme Activities
- 5D Model-Based Quantity Take-Off and Cost Plan Linkage
- Security-Minded Information Management Under ISO 19650-5

Day 5: Handover, BIM Contracts and the BIM Execution Plan Case Study

- Asset Information Handover Exercise: COBie Data Drop Check and IFC Export Review
 - BIM Appointment Clauses Review: Information Protocol, Responsibilities and Deliverables
 - BIM Adoption Scorecard: Model Quality, Clash Closure Rate and Delivery Milestone KPIs
 - Case Study: Mixed-Use Development EIR Review and BIM Execution Plan Drafting
 - BIM Execution Plan Presentation and Peer Review Panel
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Skills You Will Gain:

- Information Requirements Definition
- BIM Execution Planning
- Information Delivery Scheduling
- Common Data Environment Administration
- Model Federation and Clash Resolution
- Level of Information Need Specification
- Asset Information Handover
- BIM Adoption Measurement

Why Attend This Course:

- Return with a BIM Execution Plan and information delivery and federation strategy drafted for a project of your own
- Replace ambiguous model requests with information requirements that delivery teams can price, plan and meet
- Catch coordination clashes and missing asset data before they reach site or the operator
- Compare BIM management practice with project, design and construction teams from building, infrastructure and public works

Conclusion:

Model-based delivery succeeds when every party knows what information is required, when it is due, where it lives and who approves it. The course moves from BIM concepts, maturity and roles, through the ISO 19650 information management framework, BIM execution plans, CDE workflows and level of information need, to federation, clash detection, 4D and 5D use and information security. The final day applies that material to handover, appointment clauses, adoption KPIs and a mixed-use case, producing a BIM Execution Plan ready for project use.