Appendix D6

Pre-Appointment BIM Execution Plan

Templates for CIC BIM Standards General

(with Hong Kong 'Local Annex' of ISO 19650-2:2018)

Version 2.1 - 2021

Document Revision Tracking

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Contents

Introduction

Pre-Appointment BIM Execution Plan

(This template has been prepared on behalf of the CIC to enable projects to deliver their Building Information Modelling requirements in accordance with the CIC BIM Standards (General).)

This document is a response to the Appointing Party / Clients Information Requirements and should be read in conjunction with the documentation identified in Chapter 2 as defining the information requirements.

(This document should be completed by the delivery team as part of a collaborative submission and reviewed with all key project stakeholders.)
The document requires the completion of the Appointing Party / Clients Information requirements which are to be developed and completed with the assistance of the Design Team, Facilities Management and Operations team as well as other key stakeholders with an interest in or are possible beneficiaries of the BIM implementation plan.

As identified within the CIC BIM Standards (General), the initial Pre-appointment BEP is part of the Draft BIM IP and provided to the Appointing Party / Client to assess the approach and capability of the Delivery Team. The Pre-appointment BEP contents shall include:

- Project Information (Project particulars);
- Proposed Information Management Functions (commonly known as Roles);
- BIM Goals, Uses & Deliverables;
- Proposed organisation structure and Delivery Team composition;
- Proposed names and resumes of individuals to undertake information management functions;
- Delivery Team Capability and Capacity Assessment;
- Proposed Information Delivery Strategy;
- Proposed EIR Strategy;
- Proposed Project Information Standards (formerly / commonly known as standards on BIM Procedures);
- LOD Responsibility Matrix;
- Proposed Federation Strategy;
- Proposed Project information production
- methods and procedures;
- Goals for collaborative production;
- Proposed Delivery Team Risk Register;
- Proposed Mobilisation Plan; and
- Proposed Schedule of software (including versions), Hardware, CDE and IT infrastructure.

1   Project Information

1.1   Project Information

The general project information is as follows:

Project Name	(Add project Name)
Project Address	(Add Project Address)
Project Number (Appointing Party / Clients Project Number or reference)	(Add Appointing Party / Clients Project Number)
Appointing Party / Client Name	(Add Appointing Party / Client Name)
Appointing Party / Client Address	(Add Appointing Party / Client Address)
Start Date	(Add Project Start Date)
Project Work stage(s)	(Add Project Work Stage(s))
Contract Form	(Add Appointment / Contract form)
Project Description	(Provide description of the project)
Project Brief	(Provide text or identify the document setting out the project brief)
Project Deliverables	Provide text or identify the document setting out the project deliverables)
BIM Protocol	(Identify the document setting out the BIM Protocol)

1.2   Other delivery team documentation

This pre-appointment BIM Execution Plan is one of a number of documents which make up the response to the information requirement as part of the Draft BIM Implementation Plan, as identified within the CIC BIM Standards (General). The other documents are identified in the following table:

Name	Delivery Team Document Title etc	Rev	Status

2 Project Information Functions

The section details those individuals taking on board the roles and responsibilities identified for the project to meet the information management functions identified. Each delivery team should identify those undertaking these requirements.

2.1 Appointing Party/ Client Management Functions

This project functions undertaken on this project will be undertaken by:

Project Function	Name	Organisation	Contact Details (Email)	Telephone/ Mobile
(Appointing Party / Client Delivery Manager)	(Insert name)	(Insert organisation name)	(Insert email address)	
(Appointing Party / Client Information Manager)				
(Asset Information Manager)				
Security Information Manager				

2.2 Project Information Management Functions

This following identified project functions undertaken on this project will be undertaken by:

Function	Name	Company	Contact Details (Email)	Telephone/ Mobile
(Lead Designer)	(Insert name)	(Insert organisation name)	(Insert email address)	
(Delivery Manager)				
(Information Manager)				
(Asset Information Manager)				
(Security Information Manager)				

2.3   Per Task Team Information Management Roles

Each Task Team associated to the project will provide the names, titles and contact details of those undertaking the identified information management functions of Task Team Manager, Task Information Manager, and Interface Manager:

Task Team	Function	Name	Title	Contact Details (Email)	Telephone/ Mobile
(Team 1)	(Task Team Manager)	(Insert name)	(Insert title)	(Insert email address)	
(Team 1)	(Information Manager)	(Insert name)	(Insert title)	(Insert email address)	
(Team 1)	(Interface Manager)	(Insert name)	(Insert title)	(Insert email address)	
(Team 2)	(Task Team Manager)	(Insert name)	(Insert title)	(Insert email address)	
(Team 2)	(Information Manager)	(Insert name)	(Insert title)	(Insert email address)	
(Team 2)	(Interface Manager)	(Insert name)	(Insert title)	(Insert email address)	
(Team 3)	(Task Team Manager)	(Insert name)	(Insert title)	(Insert email address)	
(Team 3)	(Information Manager)	(Insert name)	(Insert title)	(Insert email address)	
(Team 3)	(Interface Manager)	(Insert name)	(Insert title)	(Insert email address)	
(Team 4)	(Task Team Manager)	(Insert name)	(Insert title)	(Insert email address)	
(Team 4)	(Information Manager)	(Insert name)	(Insert title)	(Insert email address)	
(Team 4)	(Interface Manager)	(Insert name)	(Insert title)	(Insert email address)	
(Team 5)	(Task Team Manager)	(Insert name)	(Insert title)	(Insert email address)	
(Team 5)	(Information Manager)	(Insert name)	(Insert title)	(Insert email address)	
(Team 5)	(Interface Manager)	(Insert name)	(Insert title)	(Insert email address)	

Individual Contact information should be made available via the project contact sheet document identified below:

Project contact sheet document:
(Insert Document name)

2.4   Information responsibilities and authorities

The responsibilities and authorities for the key Project and Task functions are identified as follows:

Project Management		
Project Delivery Manager		
Responsibility	Authority	Name(s)
(Ensure information delivery is in accordance with the MIDP.) *(Enable information exchange through the CDE.)* *(Review and accept information into the Information Model.)* *(Ensure project delivery milestone are met.)*	*(Enforce delivery of information against the project BIM Execution Plan and information requirements.)* *(Accept / reject information exchanges within the CDE.)*	
Lead Consultant		
Responsibility	Authority	Name(s)
(Ensure delivery of a spatially correct model coordination.) *(Ensure coordinated delivery of all design information.)* *(Resolve coordination issues raised by Task Teams and instruct relevant task teams to make necessary changes to models.)*	*(Review and Accept design models through design review process.)* *(Approve design changes and instruct task teams.)*	
Project Information Manager		
Responsibility	Authority	Name(s)
(Ensure information deliverables have appropriate status codes and revisions applied.)	*(Confirm compliance with information delivery requirements.)*	

Task Information Management

Task Delivery Manager

Responsibility	Authority	Name(s)
(Development of TIDP) *(Ensure information delivery is in accordance with the TIDP.)* *(Enable information exchange through the CDE.)* *(Review and accept information into the Information Model.)* *(Ensure task delivery milestone are met.)*	*(Enforce delivery of information against the project BIM Execution Plan and information requirements.)* *(Approve information exchanges within the CDE.)* *(Ensure technical competency of information deliverables.)*	

Task Information Manager

Responsibility	Authority	Name(s)
(Ensure appropriate status codes and revisions for information exchanges.) *(Ensure compliance with project information standards and project information production method and procedures.)*	*(Review information exchanges.)* *(Confirm compliance with information requirements.)*	

Task Interface Manager

Responsibility	Authority	Name(s)
(Ensure spatial coordination.) *(Liaise and raise coordination issues.)*	*(Propose resolutions to coordination issues.)*	

Information Authors

Responsibility	Authority	Name(s)
(Ensure spatial coordination within allocated volumes.) *(Produce task deliverables.)*	*(Ownership of information produced.)*	

Refer to Section 4 for Resumes of individuals to undertake Information Management functions.

(For Clarity the Client should also identify within their information requirements those undertaken Client based information management roles).

2.5 Authorisations for Security, extranet, and document distribution

The following individuals are authorised to undertake the identified functions:

Company Name	Authorised Person	Authority (Upload, Download, Change Access / Distribution, Archive)	Accepted

3 BIM Use, goals, and deliverables

3.1 Schedule of BIM uses

The following schedule indicates both the Appointing Party / Clients and the delivery teams BIM use, goals and deliverables to ensure transparency regarding what is and what is not being produced:

		Appointing Party / Client	Delivery Team Y/N	Please list and describe the typical model, documentation and other deliverables provides against each of the identified BIM Uses provided by the organisation *(List example deliverables Information Types such as 2D drawings, 3D models, schedules etc…)*	
Ref.	BIM Use			Identify typical organisation services and deliverables created and provided against each BIM use.	Information Types delivered
1	Design Authoring	☐	☐		
2	Design Reviews	☐	☐		
3	Drawing Generation (Drawing Production)	☐	☐		
4	Existing Conditions Modelling	☐	☐		
5	Sustainability Evaluation	☐	☐		
6	Site Analysis	☐	☐		
7	Space Programming	☐	☐		
8	Cost Estimation	☐	☐		
9	Spatial Coordination	☐	☐		
10	Engineering Analysis	☐	☐		
11	Facility Energy Analysis	☐	☐		
12	Building Code Checking and Validation	☐	☐		
13	Phase Planning (4D Modelling)	☐	☐		
14	Digital Fabrication	☐	☐		

		Appointing Party / Client	Delivery Team Y/N	Please list and describe the typical model, documentation and other deliverables provides against each of the identified BIM Uses provided by the organisation *(List example deliverables Information Types such as 2D drawings, 3D models, schedules etc…)*	
Ref.	BIM Use			Identify typical organisation services and deliverables created and provided against each BIM use.	Information Types delivered
15	Site Utilisation Planning	☐	☐		
16	3D Control and Planning	☐	☐		
17	3D Construction Coordination	☐	☐		
18	Construction System Design	☐	☐		
19	Construction Quality Management	☐	☐		
20	As-Built Modelling	☐	☐		
21	Maintenance Scheduling	☐	☐		
22	Project Systems Analysis	☐	☐		
23	Space Management and Tracking	☐	☐		
24	Asset Management	☐	☐		
25	Sales and Marketing	☐	☐		
26	Heritage Information Modelling	☐	☐		

3.2   Proposed Organisation structure and delivery team composition

The following Organisations are identified as representatives of the Appointing Party / Client on this project:

Function	Role Code	Organisation Name	Originator Code	Contact
(Appointing Party / Client)				
(Appointing Party / Clients Agent)				
(Appointing Party / Clients Information Management)				
(Other)				

The following Organisations are identified as the delivery team on this project:

Function	Role Code	Organisation Name	Originator Code	Contact
(Architect)				
(Structural Engineer)				
(Mechanical Engineer)				
(Electrical Engineer)				

4 Capability and capacity assessment

The following capability and capacity assessments have been used to identify the proposed solutions and approaches to the information requirements as set out.

4.1 Delivery team capability and capacity assessment

4.1.1 Capability Assessment Template

The following Capability Assessment Template covering BIM, ICT and project experience has been provided for use by the delivery team members:

Capability Assessment Template:
(CIC BIM Capability Assessment Template)

4.1.2 Completed BIM Capability Assessments

Each of the following Task teams have completed a Capability Assessment covering their ICT and BIM capability requirements using the following templates:

Organisation	Task Team	Capability Assessment	Check
Company 1			☐
Company 2			☐
Company 3			☐
Company 4			☐
Company 5			☐
Company 6			☐

BIM Capability Assessment summary

The results of the above have been captured in the BIM Capability Assessment summary which sets out the delivery teams BIM capability. The results from this have contributed to the proposed approach and the supporting document is identified as:

Capability Assessment Summary:
(Complete CIC BIM Capability Assessment Summary Spreadsheet)
The Capability Assessment Summary identified the following:
(Provide appropriate section information if applicable)

4.2 Proposed Name and resumes of individuals to undertake information management functions

Please provide supplier resource proposed for the project including the key personnel within the organisation relating to BIM /ICT, including Project Leader/ Management / Director, CAD/BIM Director / Manager, IT Director/ Manager.

Company	Role	Resource Numbers	Levels of Competence	Years of Experienc	Names of individuals	Resume Y / N
Name 1	Architect	2	RIBA, HK BIM Manager	8		☐
	Architectural Technologist	4				

5 Information Strategies

5.1 Delivery Team Information requirements

The following documents make up the delivery teams' response to information requirement in addition to those identified in 1.2 Information requirements provided to task team members which defines the basis for this implementation plan:

Name	Delivery Team Document Title etc	Rev	Status
Organisation Information Requirement	*(Identify any delivery team Organisational information requirements)*		
Asset Information Requirement	*(Identify any delivery team Asset information requirements)*		
Project Information Requirements	*(Identify any delivery team Project information requirements)*		
Security Information Requirements	*(Identify any delivery team Security information requirements)*		
Exchange Information Requirements	*(Identify any delivery team Exchange information requirements)*		
Level of Information Need	*(Identify any delivery team Level of information need requirements)*		
Information Protocol	*(Identify any delivery team project information protocol)*		

5.2 Proposed EIR Strategy

This document is a direct response to the Exchange Information Requirements (EIR) and should respond to the following sections of the EIR as defined within the CIC BIM Exchange information Requirements (EIR) Template:

EIR Requirements and Objectives	Delivery Mechanism	Responsibility
BIM Personnel	BEP Section 2	*(Name / Function)*
Common Data Environment (CDE)	BEP Section 5.2	*(Name / Function)*
BIM Contractual Documents	BIM Implementation Plan	*(Name / Function)*
BIM Uses	BEP Section 3	*(Name / Function)*
Quality Assurance	BEP Section 5.2 & 5.6	*(Name / Function)*
Handover of Project Deliverables	BEP Section 5.2	*(Name / Function)*
BIM Models Management	BEP Section 5.2	*(Name / Function)*
BIM Objects	BEP Section 5.2	*(Name / Function)*
Training	BEP Section 5.2.1	*(Name / Function)*
Hardware and Software Requirements	BEP Section 5.10	*(Name / Function)*
BIM Standards and Guidelines	BEP Section 5.3 & 5.6	*(Name / Function)*

5.2.1 Training Requirements

Based upon the requirements set out within the EIR:

Training Requirement	Organisation Providing Training	Description	Completed

5.2.2 Proposed Information Delivery Strategy

The Client expects the BIM Process to support the Information Delivery Strategy aligned to the project work stages.

Schedule of work stages and overview of key information deliverables against each stage.

Confirmation of how information shall be stored and shared.

Approach to design authoring and model verification.

5.2.3 Task Information Delivery Plan (TIDP)

Prior to appointment each task team shall prepare a task information delivery plan (TIDP) identifying their information deliverables and this shall not be limited to just models and drawings. When completed all Teams shall publish their TIDPs to the Shared functional state of the CDE. TIDPs when coordinated with the Master Information Delivery Plan shall reflect the milestone dates and project programme. The proposed TIDP Template to be used on the project is:

The project Task Information Delivery Plan Template is:
(Provide document name if applicable:)

5.2.4 Master Information Delivery Plan (MIDP)

Prior to appointment the master information delivery plan will be developed by the Lead Consultant considering the requirements of each Task Teams TIDP. The coordinated MIDP must be developed, communicated, and agreed with the delivery team using an appropriate planning tool prior to being published. The MIDP will list all information deliverables for the identified project stage and any changes or amendments shall be managed using change management controls. The proposed approach to producing the MIDP is:

The project Master Information Delivery Plan will be produced using:
(Provide software / document name if applicable:)

5.3   Proposed Project Information Standards

The proposed project information standard and response to the Appointing Party / Clients requirements is as follows:

The project information standard document provided is:
(Provide response or document name)
The response to the project information standard is provided in:
(Provide document name and appropriate section information if applicable)

5.4   Responsibility Matrix

The proposed project Responsibility Matrix and response to the Appointing Party / Clients requirements is as follows:

The project Responsibility Matrix document provided is:
(Provide response or document name)
The response to the project Responsibility Matrix is provided in:
(Provide document name and appropriate section information if applicable)

5.5   Proposed Federation Strategy

The proposed project federation strategy and response to the Appointing Party / Clients requirements is as follows:

The project federation strategy document provided is:
(Provide response or document name)
The response to the federation strategy is provided in:
(Provide document name and appropriate section information if applicable)

5.6   Proposed Project information production methods and procedures

5.6.1   Project Information production methods and procedures

The project information production methods and procedures documentation response to the Appointing Party / Clients requirements is as follows:

The project information production methods and procedures document provided is:
(Provide response or document name)
The response to the project information production methods and procedures is provided in:
(Provide document name and appropriate section information if applicable)

5.6.2   Common Data Environment (CDE)

The proposed approach and Common Data Environment (CDE) solution as well as methods and procedures document provided is:
(Provide response or document name)
The response to the Common Data Environment (CDE) requirements is provided in:
(Provide document name and appropriate section information if applicable)

5.6.3   Quality Assurance

The proposed Quality Assurance approach is identified in the following document:
(Provide response or document name)
The response to the Quality Assurance requirements is provided in:
(Provide document name and appropriate section information if applicable)

5.7   Goals for collaborative production

The proposed goals for collaborative production and response are as follows:

The project goals for collaborative production provided is:
(Provide response or document name)
The response to the Goals for collaborative production is provided in:
(Provide document name and appropriate section information if applicable)

5.8   Proposed Delivery Team Risk Register

The proposed project information standard and response is as follows:

The project information standard document provided is:
(Provide document name)
The response to the project information standard is provided in:
(Provide document name and appropriate section information if applicable)

5.9   Proposed Mobilisation Plan

The proposed project information standard and response is as follows:

The project information standard document provided is:
(Provide document name)

The response to the project information standard is provided in:
(Provide document name and appropriate section information if applicable)

5.10 Proposed Schedule of software (including versions), Hardware, CDE, IT infrastructure and Data Backup

The proposed project information standard and response is as follows:

The project schedule of software, hardware, CDE, IT Infrastructure and data backup provided is:
(Provide document name)
Further information relating to this includes:
(Provide appropriate section information if applicable)