

Pre-appointment and Delivery Team's BIM Execution Plan (BEP)

Guidance

Contents

Executive summary	1
1 Introduction	2
1.1 Project description	2
1.2 Delivery team's scope and collaboration goals	2
1.3 Information management responsibilities	3
2 Information delivery strategy	4
2.1 Objective/goals for the collaborative production of information	4
2.2 Delivery team's organisational structure and composition	5
2.3 Delivery team's detailed responsibility matrix	6
2.4 Schedule of software	7
2.5 Federation strategy	7
2.6 Information delivery plans	8
2.7 Delivery team's information delivery risk register	9
2.8 Mobilisation plan	9
2.9 Project information model (PIM) delivery strategy	11
2.10 Asset information model (AIM)/handover	11
3 Project information standards, information production methods and procedures adjustments/additions	12
3.1 Information standards	12
3.1.1 Information container identification conventions	13
3.1.2 Health and safety and design construction risk management	14
3.2 Information production methods and procedures	16
3.2.1 Special coordination strategy	16
3.2.2 Information management key performance indicators (KPI)	18
3.2.3 Information model quality	19
3.2.4 Information security requirements	20
4 Appendix	22
4.1 Delivery team's detailed responsibility matrix	22
4.2 Master information delivery plan (MIDP)	22
4.3 Mobilisation checklist	22

Tables

Table 1.1: Information management function schedule	3
Table 2.1: Delivery team directory	5
Table 2.2: Required exchange formats	7
Table 3.1: Field 2 – Originator	13
Table 3.2: Field 3 – Volume	13
Table 3.3: Field 4 – Level codes	14
Table 3.4: Risk parameter standards	14
Table 3.5: Clash avoidance authorities	16
Table 3.6: Clash tests and tolerances	18
Table 3.7: Key performance indicators (KPIs)	18
Table 3.8: Quality requirements	19
Table 3.9: Security clearance levels	21

Figures

Figure 2.1: High-level volume strategy	8
Figure 2.2: Information production mobilisation	10

Executive summary

The international information management standards ISO 19650–1:2018 and ISO 19650–2:2018 define the recommended concepts and principles for information management using building information modelling (BIM), as well as specifying the activities to be undertaken to support the delivery phase of an asset.

During the tender process, the lead appointing party will create a pre-appointment BIM execution plan (pre-BEP) that proposes how a potential delivery team would undertake the information management activities on the project. This includes any suggested amendments or additions to the proposed project's information standards, as well as the information production methods and procedures.

Upon appointment, the delivery team's BIM execution plan (BEP) will be confirmed by the lead appointing party. This typically involves updating their pre-appointment BEP (pre-BEP) to include any feedback from the appointing party. Any agreed changes to the information standards, information production methods and procedures will be made by the appointing party and should remain separate from the delivery team's BIM execution plan (BEP) but still form part of the appointment. Before finalising the BIM execution plan, there should be further collaboration with the wider delivery team/all task teams. It should confirm the team's methodology to meet the appointing party's information requirements, defining a common approach for the whole delivery team to adopt in order to meet each information delivery milestone.

This guidance has been designed to assist with both the production of the pre-appointment BIM execution plan (pre-BEP) and, upon appointment, the development of the delivery team's BIM execution plan (BEP). Both the template and this corresponding guidance document have been structured to include the information delivery strategy (Section 2), which will be required for both iterations of the execution plans and production methods and procedures adjustments (Section 3), which is only for pre-appointment/tender.

When filling in the relevant template, it is important to remember the key purpose of the BIM execution plans:

- The pre-appointment BIM execution plan (pre-BEP) is for proposing an approach, including suggesting adjustments to the project information standards, information production method and production.
- The delivery team's BIM execution plan (BEP) is to confirm the delivery team's approach only.

Note: The BIM execution plan (BEP) should reflect/respond to the exchange information requirements (EIR), and therefore any sections that do not correlate to the information requirements or information management processes (ISO 19650 series principles), or provide any project-specific information, should be omitted.

1 Introduction

Describe how the document is structured and how it should be used.

This document has been developed to outline how the information management of the project will be carried out.

Section 2 will describe how the delivery team is expected to comply with the information requirements. The delivery team is committed to delivering this project while conforming to the ISO 19650 series.

1.1 Project description

Give a short description of the project. It is important that the delivery team knows what the scope of the project is and the kind of project they will be working on. This helps to eliminate ambiguity and misunderstanding.

The following details are specific to **{project name}** and are intended to provide a project overview for reference.

<Briefly describe the project, which could include the project location and a general explanation of the intended use. If the project is described elsewhere, this section could be omitted.>

1.2 Delivery team's scope and collaboration goals

It is likely that there will be more than one delivery team appointed throughout the duration of the delivery phase of an asset, and therefore it would be useful to briefly outline the scope of this particular delivery team.

This could include the delivery team's goals for information production collaboration.

This delivery team's BIM execution plan (BEP) covers their appointment from **{project stage}** to **{project stage}**.

Collaboration is paramount to the success of any project, as well as working to the appointing party's project goals; we are committed to improving every aspect of our involvement through the transparent collaboration of design, information and involvement of each task team.

<This section could be omitted or a reference provided if these details are outlined within other appointment documentation. This section is to assist users who may not be familiar with, or do not have

full access to, the delivery team's appointment documentation to understand their project participation. Provide an overview of how this delivery team is involved in the project.

Although this information delivery strategy has been developed to meet the appointing party's goals and information requirements, each delivery team may have additional collaboration goals that will benefit their process and provide an explanation of these goals.>

1.3 Information management responsibilities

Propose (pre-appointment) and then confirm (post-appointment) which information management tasks will be undertaken by whom.

Reference any relevant experience or qualifications they may have to demonstrate competence.

The information functions have been appointed to the following delivery team members and are aligned with those specified within ISO 19650–2:2018.

The resumes of each individual's competencies are specified within **{insert location}**.

<The example below demonstrates the detailed matrix of information management functions within the delivery team. In the pre-appointment BIM execution plan (pre-BEP), this could be kept to just the originator/task team. The functions should reflect any of the appointing party's requirements and could be expanded from ISO 19650–2:2018, Annex A, but they should reflect the appointment.>

Table 1.1: Information management function schedule

Information management function	Name	Task team	Email
Nominate individuals to undertake the information management function	A. Nother	ABC Ltd	Another@ABC.com
Establish the delivery team's (pre-appointment) BIM execution plan	A. Nother	ABC Ltd	Another@ABC.com
Assess task team capability and capacity	A. Nother	ABC Ltd	Another@ABC.com
Establish the delivery team's capability and capacity	A. Nother	ABC Ltd	Another@ABC.com
Establish the delivery team's mobilization plan	A. Nother	ABC Ltd	Another@ABC.com
Establish the delivery team's risk register	A. Nother	ABC Ltd	Another@ABC.com
Compile the delivery team's tender response	A. Nother	ABC Ltd	Another@ABC.com
<Insert task.>	<Insert name.>	<Insert team.>	<Insert email.>

2 Information delivery strategy

Propose (pre-appointment) and then confirm (post-appointment) the methodology required to meet each of the information requirements.

This section captures the method to be adopted by the whole delivery team to meet each information requirement, to ensure the successful delivery of each delivery milestone.

2.1 Objective/goals for the collaborative production of information

Propose (pre-appointment) and then confirm (post-appointment) the objectives and goals that influenced the development of this BIM execution plan (BEP).

The following details are specific to **{project name}** and are intended to provide an overview of the key objectives and goals that informed the production of this BIM execution plan (BEP).

<This section could be omitted, or a reference provided if these details are outlined within other appointment documentation. This section is to assist users who may not be familiar with or have full access to the delivery team's appointment documentation understand their project participation. Provide an overview of how this delivery team is involved in the project.

Although this the information delivery strategy has been developed to meet the appointing party's goals and information requirements, each delivery team may have additional collaboration goals that will benefit their process. Provide an explanation of these goals.>

2.2 Delivery team's organisational structure and composition

Propose (pre-appointment) and then confirm (post-appointment) the delivery team's structure, including hierarchy and information workflows.

This is different to the information management responsibilities, which should be part of the information standard, production methods and procedures.

For effective communication and information production, it is important to understand the relationship between task teams.

<The example below demonstrates the delivery team's directory, including the hierarchy between task teams. Figure 8 from ISO 19650-1:2018 illustrates the delivery composition and is intended to provide an understanding of the delivery team's contractual structure and the expectations of each task team, including information workflows. A similar diagram could be produced to illustrate the directory and intended authorisation and approval responsibilities. Confirm, if applicable, any changes to the information management responsibilities.>

Table 2.1: Delivery team directory

Task team/ organisation	Contact name	Role(s)	Security clearance (if applicable)	Contact (CDE URL)	Dependent
Task team 1/ Lead appointing party	A. Nother	A- Architect Project Manager Lead Designer	L2		S – Structural engineer M – Mechanical engineer
<Insert task team>	<Insert contact name>	<Insert project role>	<Insert security clearance>	<Insert contact method>	<Insert dependant>
<Add or subtract as required>					

2.3 Delivery team's detailed responsibility matrix

Propose (pre-appointment) and then confirm (post-appointment) who is responsible for each element (graphical and data) of the information model, for each project stage/information deliverable.

The delivery team's detailed responsibility matrix, **{insert location}**, provides a breakdown of which task team is responsible for which element of the information model, including the relevant level of information need (LOIN) for each delivery milestone.

<Describe/reference the delivery team's responsibility matrix. There will be a potential two iterations of the responsibility matrix. At the tender stage it should describe a high-level reasonability matrix, and upon appointment it should be developed to provide more detail about the information deliverables.>

2.4 Schedule of software

Provide a schedule of software that the delivery team will utilise to meet the information requirements.

The delivery team shall use the following software to produce the information deliverables for this project.

<The example below demonstrates the software that will be utilised/adopted on the project.>

The software below will be used to meet the information requirements for this project. The hardware and proposed IT infrastructure are as identified in **{insert IT assessment}**.

Table 2.2: Required exchange formats

Information type	Software	Native file format	Version
MS Office documentation	Software Ltd	XYZ	2.1
Models and drawings	<Insert software>	<Native file formats>	<Version>
GIS models	<Insert software>	<Native file formats>	<Version>
Cost plans	<Insert software>	<Native file formats>	<Version>
Programmes	<Insert software>	<Native file formats>	<Version>
Photos, videos, animations	<Insert software>	<Native file formats>	<Version>
<Insert other formats>			

2.5 Federation strategy

Describe how the project information model (PIM) is to be divided to allow the delivery team to work collaboratively and actively avoid coordination issues.

This strategy demonstrates how the project information model (PIM) is to be divided to allow greater collaboration.
Figure 2.1 defines separate volumes and their task team allocation.

<The example below demonstrates a possible federation strategy that identifies how the delivery team intends to subdivide and manage the information model.>

The project is to be split into spatial subdivisions/volumes to facilitate the collaboration and responsibility of each task team in accordance with ISO 19650–1:2018, Clause 10.4.

To assist with coordination between teams, the project information model will be divided first by role and then by task.

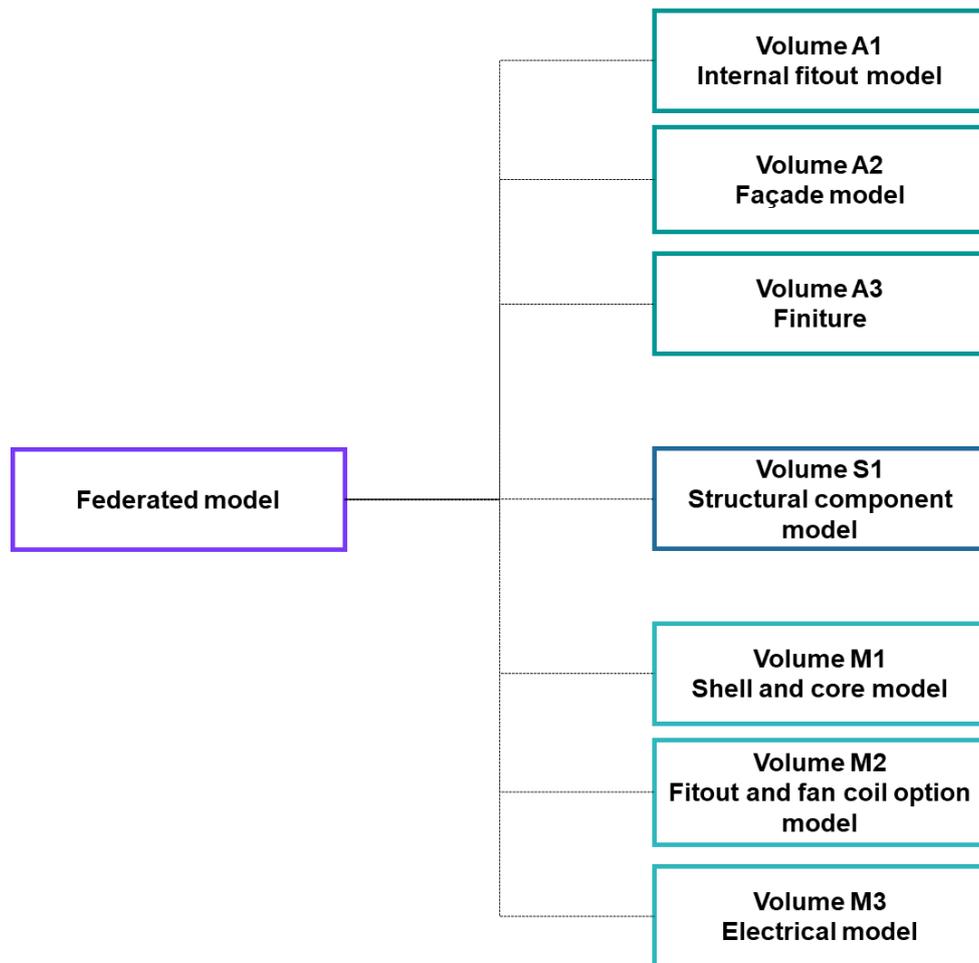


Figure 2.1: High-level volume strategy

Refer to Section 3.1.1 for the naming convention of each volume.

2.6 Information delivery plans

The information delivery plan provides a plan for when information containers/work packages are to be delivered/shared.

There is a master information delivery plan (MIDP) that is created by collating the task information plans (TIDP).

The master information delivery plan (MIDP) is assembled from the separate task information delivery plans (TIDP)s. It outlines when each information container will be delivered, and by whom, **{insert location}**.

<The example below demonstrates how the information delivery plan could be composed. Ideally, the master information delivery plan (MIDP) should be produced in a platform that allows information/work

packages to be connected to their dependencies. This is typical for most project planning software and allows the delivery plan to show the impact of any delays.>

The master information delivery plan (MIDP) provides the following information for each deliverable:

- Information container identification
- Description
- Level of definition
- Level of information
- Dependant
- Classifications
- Date of issue

2.7 Delivery team's information delivery risk register

In the tender stage any risks to the successful delivery of information should be identified.

Use this section to describe the mitigation methods and/or continued risk assessment.

The following outlines the information delivery risk mitigation methods and procedure.

<If these measures are covered within a separate appointment/contractual documentation, this section should be omitted in order to avoid confusion. This could be a reference to a risk register at tender stage and a list of mitigation measures, if applicable, upon appointment.>

2.8 Mobilisation plan

A mobilisation plan helps to ensure that everything is in place and working correctly before a project begins, which limits any potential delay to the project start date.

The delivery team should identify all the training, tests and checks that will be performed before any project work begins.

Before project commencement and after the appointment of each subsequent task team, the following mobilisation process should be deployed before the production of any information, to minimise any risk to achieving the information delivery milestones.

The checklist provided in **{insert location}** should be used by the lead appointed party and every task team before the project commences.

<The example below, Figure 2.2, demonstrates the possible mobilisation process. Ensure that you highlight any mandatory mobilisation activities, including the related responsibilities and expected timeframes.>

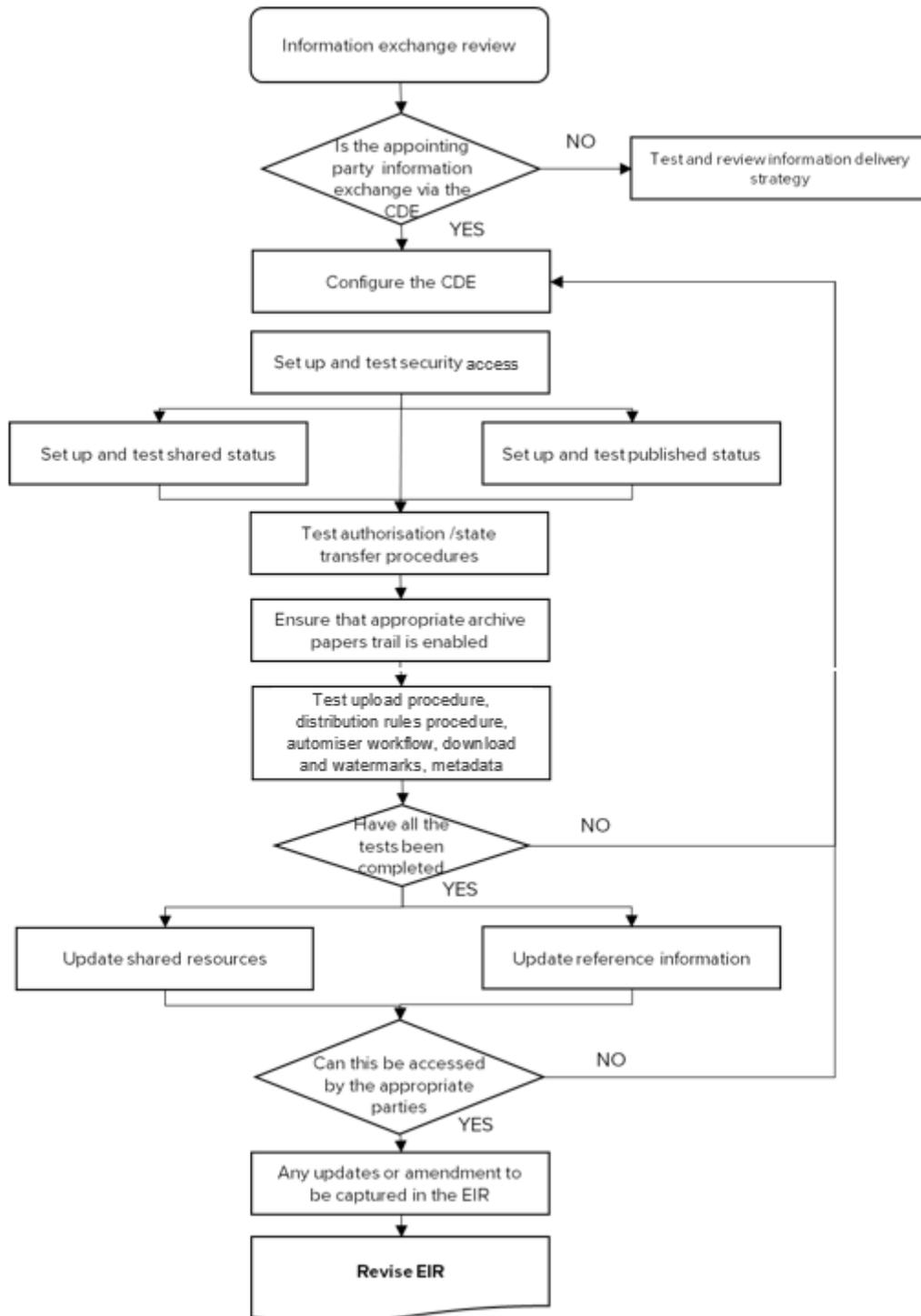


Figure 2.2: Information production mobilisation

2.9 Project information model (PIM) delivery strategy

Propose (pre-appointment) and then confirm (post-appointment) the strategy for delivering the project information model (PIM).

The project information model (PIM) comprises all the information containers submitted to achieve each information delivery milestone. The following outlines how this will be delivered to the appointing party.

<Outline how the project information model (PIM) will be delivered to the client, where applicable. This could reference any insurance or security requirements, for example, coded digital back-ups.>

2.10 Asset information model (AIM)/handover

Propose (pre-appointment) and then confirm (post-appointment) the strategy for delivering the asset information model (AIM).

The asset information model (AIM) is a subset of the project information model (PIM), to be used to support the operation of an asset. The following outlines how this will be delivered to the appointing party.

<Outline how the asset information model (AIM) will be delivered to the client, where applicable. This should include an explanation of how this information is collated and its compliance with the asset information requirements (AIR).>

3 Project information standards, information production methods and procedures adjustments/additions

This section is only for use when creating a pre-appointment BIM execution plan (BEP) and should propose any adjustments or additions to the project information standards, information production methods and procedures that were submitted by the appointing party as part of the invitation to tender. It is important to suggest any changes, since they are part of your contractual appointment, and you will therefore be required to comply with them.

If there are no proposed changes, this should be stated as part of your tender return.

This section is divided into two parts: the first half should be used to suggest amendments to information standard; and the second half for the information production methodology and procedures.

This section outlines the proposed adjustments and additions to the current project information standard, as well as the information production methods and procedures that could be implemented to benefit the project delivery.

<This section is **only** for any suggested adjustments to the appointing party's information standard, and the information production methods and procedures. There is no need to replicate any content from the original source.

It could also be a reference to national building information modelling (BIM) standards, if applicable/available. We have only provided examples of areas where further granularity of information standards, information production methods and procedures may benefit the project and the appointing party.>

3.1 Information standards

Describe any proposed changes to the current project standards.

The following standards, in addition to those specified within the information standard, are to be conformed to on this project.

3.1.1 Information container identification conventions

Information identification conventions (naming conventions) are an essential part of the production of information.

You could propose/apply the convention to your specific delivery team and project.

The following additional codes, in addition to those specified within the information standard, are to be conformed to on this project.

<The example below includes additional codes based on the ISO 19650 United Kingdom's National Annex (NA). The applicable National Annex could be adopted.>

Table 3.1: Field 2 – Originator

Originator company name	Code
<Insert company name>	<Insert originator code>

Table 3.2: Field 3 – Volume

Note: The extent of each breakdown is defined within the detailed responsibility matrix.

Task team	Volume description	Volume code
Fitout	Internal fitout model	A1
Facade	Architectural facade model	A2
Structure	Structural model	S1
Mechanical, electrical and plumbing	Shell and core model	M1
Electrical	Electrical model	E1
Landscape	Landscaping model	L1
Façade supports	Façade supports	X1

Table 3.3: Field 4 – Level codes

Level name	Description	Code	Height (above datum)
Level B2	Basement 2	B2	- 6.3m
Level B1	Basement 1	B1	- 3.4m
Level LG	Ground Floor	LG	+ 0.6m
Level M1	Performance Arts First Floor	M1	+ XXm
Level 01	First Floor	01	+ XXm
Level 02	Second Floor	02	+ XXm
Level M2	Performance Arts Third Floor	M2	+ XXm
Level 03	Third Floor	03	+ XXm
Level 04	Fourth Floor	04	+ XXm
Level R0	Roof Level	R0	+ XXm
Level R1	Upper Roof Level	R1	+ XXm
	Applies when the model contains multiple levels	ZZ	
	No applicable level	XX	

3.1.2 Health and safety and design construction risk management

Describe the standards that will be used for the health and safety requirements.

The following are the delivery team's proposed risk parameter standards, to be applied to health and safety information requirements.

<The following is an example demonstrating the approach of integrating the health and safety data into the information model. This could include references to relevant standards and/or protocols.>

These parameters can be integrated into the information model using the shared parameters, in the shared resources [{insert link or location}](#). Any elements without associated risk shall be given an 'N/A' value. Progress of health and safety information shall be monitored by the lead appointing party and addressed at each coordination meeting.

Table 3.4: Risk parameter standards

Risk parameter	Requirement
Risk Name	Unique name Element reference – role – level – risk number
Risk Category	Risk type: hazard, safety and safety issue or insurance issue
Risk Description	Brief description (only about the risk; do not include any information that is covered by the other parameters)
Associated Product	Element reference – name
Associated Activity	Link to project programme item/activity
Associated Location	Level – grid line
Risk Assessment Methodology	PAS1192P6 Figure 5
Agreed Mitigation	Brief description of mitigation

Risk Likelihood	<ul style="list-style-type: none"> • Very low • Low • Moderate • High • Very high • Unknown • N/A
Risk Consequence	
Level of Risk	
Proposed Mitigation	Brief description of proposed mitigation
Date Updated	Date (dd/mm/yy)
Date Reviewed	Date (dd/mm/yy)
Owner Discipline	Originator code – role
Risk Documentation	Link to risk documentation

3.2 Information production methods and procedures

The different methods of generating data and information can potentially impact its functionality.

Determine the information production methods and procedures. This could include responsibilities, workflows and approval processes.

The following information production methods and procedures are to be adhered to on this project.

<Define information production methods and procedures, as specified within ISO 19650–2:2018, Clause 5.1.5, which should reflect the purpose and functionality required for the information deliverables.>

3.2.1 Special coordination strategy

Provide a technical description of how you propose to perform the clash renditions.

The below are additional clash rendition methods that we propose should be added to the spatial coordination methodology.

<The example below demonstrates the delivery team's strategy to ensure a fully coordinated model. This section should outline the strategy only; any technical requirements should be submitted during the tender as an adjustment/addition to the project's information standards, information production methods and procedures.>

The design shall be coordinated throughout the project, with each stage complying with the delivery team's detailed responsibility matrix (Section 4.1). As each task team with design responsibility is engaged, they will participate fully in the design development process that is relevant to their works, as per the federation strategy.

This will be continually reviewed and monitored throughout. Each task team is responsible for the coordination of their design, and any current or potential issue should be identified using the comment/review functionality on the common data environment (CDE) and the resolution agreed during coordination meetings. This will also be supported by lead appointed party clash detection activities, where the agreed test and tolerances will be performed before the coordination meeting. The agreed resolution of each clash will be documented and distributed to the delivery team. A full report will be submitted to the appointing party following each meeting.

Table 3.5 (below) outlines the delivery team's process and responsibilities.

Table 3.5: Clash avoidance authorities

Process	Responsible party
Clash avoidance	All parties are responsible for clash avoidance – both visual and automated.

Project-wide clash tolerance list	The lead appointed party shall be responsible for facilitating the agreed clash tolerance list. Each task team shall be responsible for contributing their required clash sets and tolerances.
Production and distribution of clash rendition models into the CDE	Each task team shall be responsible for uploading a suitable version of the clash rendition models, as agreed.
Federation of the clash rendition models	The lead appointed party will federate the clash rendition models and check for accuracy of location, orientation and appropriate supply of information from the supply chain.
Running clash tests	The lead appointed party will import and run the agreed clash list and tolerance list. Once imported, the tests shall be run to produce results. The report is to be shared prior to coordination workshops.
Evaluation of clash results	During the coordination workshop, the lead appointed party shall evaluate the results of the clashes and assign actions according to the owner of the clash. A clash resolution report shall be posted after the meeting.
Action tracking	Task assignees shall be responsible for resolving clashes logged.
Progress reports	The clash model will be shared with embedded clashes maintaining a single source of information. Clash progress reports will be produced monthly by the lead appointed party as a separate spreadsheet for review at the monthly coordination workshops.

To create a more efficient method of conducting the project clash renditions, Table 3.6 (below) proposes splitting the rendition into separate clash tests with the described tolerances.

Table 3.6: Clash tests and tolerances

Elements	Clash type	Tolerance
Structural Columns vs MEP	Hard	+/-10mm
Curtain Walling vs Structure	Hard	+/-10mm
Structural Floors vs MEP	Hard	+/-10mm
Internal Walls vs MEP	Hard	+/-10mm
Curtain Walls vs Internal Walls	Hard	+/-10mm
Ceilings vs Internal Walls	Hard	+/-10mm
Curtain Walls vs Roof	Hard	+/-10mm
Structure vs Roof	Hard	+/-10mm
MEP VS Roof	Hard	+/-10mm
Ceilings vs Ducts	Hard	+/-10mm

3.2.2 Information management key performance indicators (KPI)

Outline how the delivery team will contribute to fulfilling the key performance indicators (KPIs). This should include a description of how the information is to be produced, who is responsible and the reporting mechanism. This could be references to the information standards, information production methods and procedures.

Table 3.7: Key performance indicator Table 3.7 shows how the key performance indicators (KPIs) will be monitored and reported.

<The example below demonstrates how the appointing party's key performance indicators (KPIs) will be met by the delivery team.>

Table 3.7: Key performance indicators (KPIs)

KPIs	Description	Frequency	Project stage	Method	Responsibilities
Reduction design packages approval	Every task team is to report quarterly relating to how the approval process via the common data environment (CDE) quality insurance workflow has affected approval times against the traditional paper-based quality assurance procedures. This	Quarterly	02 to 05	The common data environment (CDE) will be configured to start either the 'lead appointed party authorisation' or 'appointing party acceptance' workflow automatically when the appropriate status code is used. Please refer to the information standards (insert reference) .	Each task team must use the appropriate status codes. The lead appointing party will be responsible for generating and issuing the report.

	should be shown as a percentage. The delivery team will report the overall state of the project. This should be shown as a percentage.			The workflows, as described in the common data environment (CDE) protocol, support the entire authorisation process, from issue to approval. Every quarter a report will be produced from the common data environment (CDE) outlining how long each workflow took to complete; this will be scheduled and include the average times for each party and issued to the appointing party.	
Clash detection and resolution	Every month the project information manager will submit a report on how many clashes are left compared to the overall clashes identified to date. This should be shown as a percentage.	Monthly	02 to 05	Refer to Section Error! Reference source not found.	
<Insert KPI title>	<Insert description>	<Insert frequency>	<Stage >	<Insert method>	<Insert responsibilities >

3.2.3 Information model quality

Provide the minimum quality assurance requirements that each aspect of the information model should adhere to.	Task team members shall execute the following quality control (QC) procedures.
--	--

<The example below, Table 3.8, demonstrates a possible quality assurance and quality control methodology that may be adopted, in table format. Ensure that the minimum expectation of all information is outlined.>

Table 3.8: Quality requirements

Information container aspect	Quality requirements
Geometrical model files	<p>Checks for verification of models prior to sharing should include, but are not limited to:</p> <ul style="list-style-type: none"> • Linked models/information (not specifications, but live native model files) have been audited and purged. • File format and naming conventions conform to this document and remain constant for the life span of the project. • Data segregation conforms to project requirements.

	<ul style="list-style-type: none"> • 3D model and 2D drawings are up to date and the 2D information has been derived from the 3D model. • All objects in a 3D default view must be made visible. • All ownership of project work sets has been relinquished. • All models to be using the sharing coordinate system defined at the outset of the project. • Check the area and volume computations against technical requirements. • Model files are detached from central file. • Leave any 3D views that are required for a specific export process. • Model file has been audited, purged and compressed. • Any changes since the last issue are communicated to the project team. • Any warnings highlighted in the BIM application have been addressed or responsibility has been taken.
<p>Model spatial integrity</p>	<p>The following rules shall apply to the model spatial integrity:</p> <ul style="list-style-type: none"> • Space definition – bounding boxes used to represent spaces and zones shall match with architectural requirements and values. • All walls shall be properly joined to prevent spaces being incorrectly defined. Bounding boxes of spaces shall not conflict. • Spatial information shall be generated and associated with bounding elements (walls, doors, windows, floors, columns, ceilings).

3.2.4 Information security requirements

<p>Identify/reference any security requirements that should be adhered to on this project.</p> <p>Provide an explanation of how these requirements will be met and the responsibilities associated with them.</p>	<p>All information generated for this project is to comply with the security requirements {insert reference}, in terms of protection of any commercially sensitive and/or personal data/information, as required in compliance with ISO 19650–5: 2020.</p>
---	---

<The example below demonstrates the delivery team's methodology to comply with the appointing party's information security requirements. These subsections could be adopted if they are relevant to the project. Ensure that a detailed explanation of the expectations of the delivery team is provided in terms of information production and collaboration. If this is outlined within a separate security requirement document, a reference should be provided.>

3.2.4.1 Security levels

<Describe the different security clearance levels within the project.>

The following security clearance levels are designed to control how information is managed and shared, in order to protect sensitive information. The information containers/volume/work-package security levels have been confirmed within the delivery team's detailed responsibility matrix.

Table 3.9: Security clearance levels

Clearance level	Visible to delivery team	Password-protected	Two-factor authentication	Information downloadable
L0	X			X
L1		X	X	X
L2		X	X	

All personnel involved in the handling of information will have to:

- Possess security-minded competency;
- Attend security awareness and training; and
- Attend an induction to responsible personnel and organisation security process.

4 Appendix

4.1 Delivery team's detailed responsibility matrix

4.2 Master information delivery plan (MIDP)

4.3 Mobilisation checklist

Before any information production begins, the lead appointing party and/or project information manager must initiate and complete the mobilisation plan below. This should occur at the beginning of every work stage, as outlined in Section **Error! Reference source not found.**, or when any new task team is introduced to the project.

Ref	Task	Responsibility	Task team	Date completed	Further actions/comments
A1	Have the DTCCA requirements been undertaken?				

Common data environment

B1	Configure CDE				
B2	CDE training provided				
B3	Test upload procedure				
B4	Test upload of all information format types				
B5	Test automatised workflows (please see list below)				
B6	Test distribution procedure between delivery/task teams				
B7	Information container authorisation notification process				
B8	Test metadata				
B9	Test information manager authorisation process				
B10	Test appointing party authorisation process				
B11	Test information container CDE state transfer				
B12	Test security and access settings to built asset security management plan (if applicable)				
B13	Test archiving				

B14	Test correspondence				
B15	Test RFI				
B16	Test information container review process/shared state comments				
B17	Test download and watermarks				

IT (software and hardware)

C1	Has all the relevant software been implemented by the relevant parties?				
C2	Has all the relevant software been used to test B4 above, by all task teams?				
C3	Has all hardware information been accurately outlined in the DTCCA?				
C4	Configure software settings to align with EIR and shared resources				
C5	Ensure that delivery team firewalls do not interfere with information exchanges				
C6	Confirm how the delivery team will back up the project information containers				

Standards, methods and procedures

D1	Test shared resources				
D2	If additional shared resources are required, has the production and implementation plan been produced and approved?				
D3	Review combined asset information risk register				
D4	Review and refine the volume federation strategy at each work stage				
D5	Ensure that all task teams have understood and are able to work to the IS and IMPs				
D6	Have the assumptions outlined in the risk register been addressed by the appointing party or relevant party?				

Capacity and auxiliary plan

E1	Have all task teams been able to fulfil their capability and capacity plans?				
E2	Are there full auxiliary procedures in place for every task team (including LAP and project information manager)?				
E3	Have the additional members of the delivery team (identified in the DTCCA) been recruited and/or onboarded onto the project?				
E4	Confirm that every task team still has the agreed capacity				

Education/onboarding					
F1	BIM kick-off meeting for whole delivery team, covering: Project scope Project information standards Project information production methods and procedures CDE usage Security requirements Delivery milestones Level of information need MIDP DTDRM Task team check, review, approvals Information manager authorisation Appointing party authorisation				
F2	Training in how shared resources are to be used				
F3	Have LAP procedures for task team mobilisation	LAP			