 

**AS ISO 19650 Aligned**

October 2022

**Project Information Requirements (PIR) Template**

|  |  |
| --- | --- |
| Project Reference: |  |
| Project name: |  |
| Project address/location: |  |
| Brief project description: |  |
| Appointing party: |  |

|  |  |
| --- | --- |
| Version: |  |
| Date: |  |

**NATSPEC Project Information Requirements (PIR) Template**

October 2022

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**Document references**

In this document:

* The ‘*PIR Template’* or ‘*Template*’ means the *NATSPEC Project Information Requirements (PIR) Template*.
* The ‘PIR’means theproject information requirements for the nominated project.
* The ‘*BEP*’ means the *BIM Execution Plan* for the nominated project.
* The ‘*National BIM Guide’* or ‘*Guide*’ means the *NATSPEC National BIM Guide*.

**Acknowledgements**

NATSPEC thanks the numerous individuals and organisations who contributed to the development of this document through material they provided and/or comments they made on drafts.

**Comments**

NATSPEC welcomes comments or suggestions for improvements to this document and encourages readers to notify us immediately of any apparent inaccuracies or ambiguities. NATSPEC also encourages users to share their experiences of applying it on projects with us.

Contact us via email at [bim@natspec.com.au](mailto:bim@natspec.com.au).

**Project information requirements (PIR)**

**Document control**

This table is for listing the contacts who worked on the development of the PIR, and who can be contacted to answer queries about them. Indicate responsibilities for the development of the PIR in the ‘RACI’ column.

| Title/Role | Name | Company/  Organisation | Email | Tel. No. | RACI |
| --- | --- | --- | --- | --- | --- |
| Author |  |  |  |  |  |
| Owner |  |  |  |  |  |
| Appointing party representative |  |  |  |  |  |
| Information Manager |  |  |  |  |  |

**Key to responsibilities for developing PIR**

R Responsible for undertaking activity

A Accountable for activity completion

C Consulted during activity

I Informed following activity completion

Add or amend roles in the table as required. Those shown are examples only – customise to suit the project.

Role responsible for maintaining and updating PIR:

Enter the role or individual/s responsible. Refer to required procedures for consultation, notification, review, approval, etc in **Technical,** **Project information production methods and procedures directory**.

**Version history**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Version | Date | Amended by | Approved by | Comments |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

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**Project information requirements (PIR)**

PIR are prepared by the appointing party. PIR are the pieces of information required by them to support their decision making during the delivery phase of assets. If an organisation has existing organisational PIR, e.g. for a portfolio of assets, the PIR described in this document should reference and align with them.

The information provided by the delivery team led by the lead appointing party in response to the PIR constitutes the project information model (PIM).

PIR should be expressed in a way that enables them to be readily incorporated into the exchange information requirements (EIR) for each appointment, e.g. grouped by discipline and/or trade.

Refer to AS ISO 19650.1, Section 5. and AS ISO 19650.2, Clause 5.1.2.

**Using this Template**

While asset information requirements (AIR) represent a subset of PIR, the AIR Template is designed specifically for developing AIR, so is recommended for this purpose.

This Template includes prompts for eliciting PIR and provides a structure for organising them effectively.

See *Appendix D – Defining information requirements* for an explanation of its structure and instructions for its use.

# This PIR document

## AS ISO 19650 alignment

This document is aligned with the requirements of the AS ISO 19650 series of standards and uses the terminology from them throughout. Refer to them for details of the requirements and definitions of terms.

Definitions of terms can also be found on the ISO Online Browsing Platform (OBP): <https://www.iso.org/obp/ui>

A basic understanding of the concepts, principles and terminology found in AS ISO 19650 is crucial for making effective use of this template. See the *NATSPEC National BIM Guide* for an introduction to the subject.

## Purpose

Thisdocument defines the project information requirements (PIR) for the project.

Make sure the project to which this document applies is clearly identified, e.g. in the document title, on the cover.

## Application

This PIRdocument, together with the asset information requirements (AIR), contributes to the development of exchange information requirements (EIR). The EIR forms part of the invitation to tender documentation.

Applicable project phases:

Examples of options – adjust wording to suit project:

* This PIR document applies to the design phases only of the project, up to and including the handover of the PIM from the design team to the construction team.
* This PIR document applies to the construction phases only of the project, from the handover of the PIM from the design team to the construction team and up to and including the handover of models from the construction team to the operators of the completed built asset.
* This PIR document applies to the design and construction phases of the project, up to and including the handover of the PIM from the design and construction teams to the operators of the completed built asset.

The last option offers the most opportunities to realise the potential benefits of BIM.

**Design status**

A brief description of the point design development has reached at the time invitations to tender are issued, (e.g. functional brief, concept design, sketch design, developed design, contract documentation) will also give prospective appointed parties a clearer picture of the extent to which the design has been resolved, so they can assess the resources and risks associated with developing it further, without having to infer it from the details included in the PIR alone.

Include any additional information that provides context for PIR, e.g. project plan of work, program.

# Project details

## Project description

Outline description:

Insert a brief description of the project including its purpose and/or refer to documents that describes it in more detail.

## Project goals

The appointing party’s goals for the project are shown in the **Project goals table**.

**Project goals table**

|  |  |  |
| --- | --- | --- |
| Priority | Goal description | Measures of success |
|  |  |  |
|  |  |  |
|  |  |  |

**Priority:** e.g. High, Medium, Low, 1, 2, 3, etc. Define numerical designations to make it clear what is meant by each.

**Goal description:** A brief description, e.g. Increase cost certainty. These can be expanded on as necessary in the relevant sections of the EIR.

**Measures of success:** Quantifiable if possible, e.g. reduced number of requests for information.

If goals are documented elsewhere, you may prefer to delete the table and reference the relevant document instead.

Alternatively, this table could be renamed ‘Project management goals table’ and used to document project management goals only, e.g. reduce reworks, improve health and safety. The clause title and text would have to be amended accordingly.

# Commercial

## Procurement strategy

The project procurement strategy is shown in the **Project procurement strategy table**.

**Project procurement strategy table**

|  |  |
| --- | --- |
| Project procurement strategy: |  |
| Contractor engagement: indicative date: |  |

**Project procurement strategy**: e.g. Design Bid Build, Design and Construct, Integrated Project Delivery*.* Ifnot yet decided, write ‘To be confirmed’.

The procurement strategy will determine if a single or multiple BIM Execution Plans (BEP) are required and when/how responsibilities are handed over. If the designer’s engagement is included with the contractor’s, the Design BEP and Construction BEP can be combined in one document.

If procurement details are documented elsewhere, you may prefer to delete the table and reference the relevant document instead.

Appointing party’s project procurement approach:

Outline the appointing party’s approach to project procurement to provide context for the items described in this document. This may not be applicable to those who have not procured projects before.

This can include details such as:

* The priority given to types of project information.
* In-house personnel currently responsible for project procurement, and their roles.
* Current project procurement systems in place including software used for this purpose.
* Extent of outsourcing of project procurement responsibilities and the scope of associated contracts.
* Proposed approach to transitioning information and responsibilities from the design team to construction team where applicable.

If the project procurement approach has been described in the organisational information requirements (OIR), copy it to this location. If the organisation has a formal strategy or policy document, include it in the **Annex** and reference it here.

## Project team members

The contact details for key stakeholders who contributed to the development of the PIR are shown in the **Project team members table**.

**Project team members table**

| Role | Discipline | Name | Company/  Organisation | Email |
| --- | --- | --- | --- | --- |
| Appointing party representative |  |  |  |  |
| Information Manager |  |  |  |  |
| Project Manager |  |  |  |  |

Add or amend roles in the table as required. Those shown are examples only – customise them to suit the project.

Confine contacts to those who need to be kept informed of changes in AIR or can answer queries about them.

If the details are extensive, you may prefer to include them in the **Annex** and reference it here.

## Common data environment

Provision of common data environment (CDE):

A project CDE should have been established by the appointing party in conformance with AS ISO 19650.2, Clause 5.1.7. If this is the case, enter ‘By the appointing party’ at the prompt.

If the appointing party has not established a CDE, specify the technical implementation requirements, management expectations and commercial arrangements regarding ownership and responsibilities during and after project delivery.

Establishing a CDE prior to invitations to tender has the advantage of providing a single secure location for standards and project reference information that form part of the tender documentation. This is more effective and reliable than sending them individually to each prospective appointed party.

CDE access:

Provide a link to the CDE.

Instructions for using the CDE:

Provide a link to the CDE location for instructions.

## Project information delivery milestones

The dates required by the appointing party for the delivery of project information are shown in the **Project information delivery milestones table**.

Information delivery dates should be based on the timing of key decision points for the project. Allow sufficient lead time for appointing party decision making processes between the two.

Providing a project program to prospective appointed parties – if one is available – will place milestones in context.

Make sure dates do not conflict with program requirements documented elsewhere.

See Guidance below the **Project information purposes table** for sources of plain language questions (PLQ) that can help define the asset information required for key decision points.

**Project information delivery milestones** **table**

| Delivery milestone | Weeks before\* | Key decision point | Weeks before\*\* | End of project phase |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

\* Weeks before the key decision point \*\* Weeks before end of project phase

* Edit the table as required, e.g. add or delete delivery milestones, key decision points and/or project phases.
* Enter phase names or descriptions agreed for the project, e.g. Schematic design, Contract documentation.
* Enter descriptions of delivery milestones, key decision points. Number or designate as required.
* Enter lead times between delivery milestones, key decision points and the end of project phases in the ‘Weeks before’ columns.

See Appendix D – Defining information requirements for an example of a completed table.

Dates can be substituted for lead times if they have been determined.

Project information handover procedure:

Describe the procedure for handing over the PIM to the appointing party including post-handover evaluations to confirm that their information requirements have been satisfied. Reference relevant standards such as *The Soft Landings Framework Australia and New Zealand* (CIBSE) as required.

Project information acceptance criteria: Conformance with the information requirements specified in this PIR document and the standards cited for each PIM element in **Technical**, **Standards and project reference information**.

## Existing conditions information

Available existing conditions information:

Describe the existing conditions information that will be made available for prospective appointed parties, e.g. surveys, geotechnical reports, models, asset registers. Include it in the CDE (or tender resources) and reference it in the **Project reference information directory**. If none is available, enter ‘None’ at the prompt.

Additional existing conditions modelling requirements:

Specify any modelling of existing conditions required in addition to that provided by the appointing party. Refer to *Appendix C – BIM use & enabler descriptions* **2.1 Existing conditions modelling** for guidance on defining the scope of information required.

## Project information purposes

Information purposes: The purposes of the project information required by the appointing party are shown in the **Project information purposes table**.

**Purpose of this table**

This table is used to record the purposes of the project information required by the appointing party. The purposes reflect the underlying reasons for information requirements (the ‘why’). They can provide context and assist understanding by those responding to them. Information requirements inform which properties or metadata need to be included in model objects.

Information purposes have been used in this table to group sets of related information requirements together. These include:

* Design: Information that designers are required to provide to communicate design intent.
* Construction: Information that contractors and subcontractors require to construct a built asset, e.g. drawings, specs.
* Project management – appointing party: Information that needs to be provided to the appointing party so they can assess a project’s progress and make informed decisions when responding to any issues that arise.

Note: The prospective lead appointed party may wish to add their own project information purposes when preparing their pre-appointment BIM Execution Plan.

**Project information purposes table**

|  |  |
| --- | --- |
| Information purpose | **Project information requirements** |
| **Design** |  |
|  |  |
|  |  |
|  |  |
| Construction |  |
|  |  |
|  |  |
|  |  |
| Project management – appointing Party |  |
|  |  |
|  |  |
|  |  |

* Delete groups of information purposes not relevant to the project scope, e.g. delete design purposes if BIM will only be implemented for construction phases.
* Add or delete rows as required to include the information purposes selected for the project.
* Enter the details of the information required for each purpose in the ‘Project information requirements’ column. Additional rows can be added for individual requirements under each purpose if preferred.

The following resources can assist the definition of information requirements:

* ABAB Asset Information Requirements Guide, Appendix A includes a list of plain language questions (PLQ) that can be asked to prompt answers about the information required.
* Victorian Digital Asset Strategy (VDAS) Guidance Appendix 3: Sample key decision points provides examples of PLQ that can be asked at each stage of a project.
* *BS 8536-1 and BS 8536-2 Briefing for design and construction* also include briefing checklists and PLQ useful for this purpose in Annexes A and G.

## Project information model (PIM)

Requirement: Deliver the elements of the project information model (PIM) described in the following clauses.

The delivery of the PIM may involve several different appointments at different stages of the project. Clearly defining PIR based on the appointing party’s project information purposes will assist coordination and integration of PIM content.

### PIM integration strategy

Requirement: Coordinate information included in each element of the PIM to minimise duplication and eliminate omissions and contradictions. Implement measures to integrate information to enable it to be used effectively for the purposes documented in the **Project information purposes table**.

Duplication of information in multiple locations makes its management more difficult and prone to error. Adopting the ‘single’ source of truth’ principle reduces these risks. Applying metadata to digital information for attributes such as identity and classification enables it to be stored in one location and referenced from other locations (rather than duplicated) as required.

Project information classification: Incorporate classification data in PIM information containers/files and model objects to enable the effective integration and management of information.

Classification data can be embedded in an information container/file naming convention or in metadata.

A container can be a model, a spreadsheet file, a database, an application, etc.

PIM integration measures:

Specify required measures for integrating information in each element of the PIM, i.e. models, drawings, documents and data. These can include:

* Consistent identification or tagging of objects or elements across models, drawings and documents.
* Inclusion of properties or metadata such as classification in model objects or elements.
* Adoption of data exchange standards such as IFC.

Give preference to industry standards for these items, e.g. IFC, Virtual Buildings Information System (VBIS). See <https://vbis.com.au/>

Describe the methodology for implementing the measures.

If the appointing party does not have any specific requirements for achieving integration of the PIM, delete the prompt and request proposals from the prospective appointed parties.

## PIM deliverables

Requirement: Provide the deliverables shown in the **PIM deliverables table**.

Timing: Provide the deliverables at the delivery milestones shown in the **Project information delivery milestones table**.

**Purpose of this table**

This table is used to specify the deliverables required, **based on the project information purposes** described in the **Project information purposes table**.

A process for deriving them is described in *Appendix D – Defining information requirements*.

Note: The prospective lead appointed party may wish to add deliverables based on their own project information purposes when preparing their pre-appointment BIM Execution Plan.

**PIM deliverables table**

| PIM element |
| --- |
| **Models** |
|  |
|  |
|  |
| **Drawings** |
|  |
|  |
|  |
| **Documents** |
|  |
|  |
|  |
| **Data (object-based)** |
| See **Asset object property table** |

* Add or delete rows under each PIM element for each item required and edit the descriptions to suit the project.
* Group deliverables by discipline or trade to simplify the task of incorporating them in project-related appointments.
* As-built models are covered in the AIR Template.

### PIM deliverables formats

Requirement: Provide deliverables shown in the **PIM deliverables table** in the formats shown in the **PIM deliverables format table**.

**Purpose of this table**

This table is used to specify the file or physical format of deliverables shown in the **PIM deliverables table**. The deliverable types listed in the table are examples only – the table must be customised to suit the project.

See *Appendix D – Defining information requirements* for an example of a completed table.

If requirements for individual deliverable types vary significantly, the table can be combined with the **AIM deliverables table** to show details for each.

**PIM deliverables format table**

| Deliverable | File type | Physical format | No. of copies \* |
| --- | --- | --- | --- |
| Models |  |  |  |
| Drawings |  |  |  |
| Documents |  |  |  |
| Photographic images |  |  |  |
| Videos, animations |  |  |  |
| Data |  |  |  |

\* Number of hard copies at handover to the operational phase of the asset.

If required, the number of hard copies for other information delivery milestones can be documented in the EIR.

Submission of hard copies:

Specify the procedures for submitting hard copies of deliverables including the status of copies to be provided, e.g. record documentation only, the method of delivery and responsibilities. The details can be entered here or the relevant procedure included in the **Technical, Project information production methods and procedures directory** and referenced here.

If hard copies are not required under the contract or these requirements are specified elsewhere, delete the prompt.

## Spatial object properties

Requirement: Include the properties shown in the **Spatial object properties table** in spatial objects.

Timing: Include sets of properties at the delivery milestones shown in the **Project information delivery milestones table**.

Note: A schedule of spaces/spatial objects has not been included in this template because spaces are usually documented elsewhere. Also, the properties required will usually apply to all spatial objects.

**Purpose of this table**

This table is used to specify the spatial object properties that must be included in spatial objects, based on the asset information purposes described in the **Project information purposes table**.

A process for deriving them is described in *Appendix D – Defining information requirements*.

If different property sets are required for particular groups or classes of spatial objects, subdivide the table into the groups or classes and specify the properties for each.

**Spatial object property table**

| **Property category** | **Generic property name** | **IFC4 property name or property set** |
| --- | --- | --- |
| **General ID & description** |  |  |
| **Location** |  |  |
| **Geometrical quantities** |  |  |
| **Function** |  |  |
| **Occupancy** |  |  |
| **Surface finishes** |  |  |
| **Maintenance** |  |  |
| **Condition** |  |  |

* Add or delete rows for properties in each property category and edit the descriptions to suit the project. Using IFC property names and property sets will improve the reliability of information exchanges. The NATSPEC BIM Properties Generator is also an ideal tool for selecting object properties. See <https://bim.natspec.org/tools/properties-generator>

Suggested minimum properties for all spatial objects:

* Space ID/Identification code.
* Room or space name.
* Floor level or storey.

Include the building designation or identifier if there is more than one building. The floor level or location can be embedded in the identification code as an alternative to providing a property or metadata.

Typical additional properties include:

* Geometrical quantities, e.g. floor areas, wall areas, volume (as measured by a nominated method of measurement).
* Function, e.g. office, workshop. A classification system may be used to designate this.
* Occupancy, e.g. maximum number of occupants, design occupancy load.

Refer to *ABAB Asset Information Requirements Guide*, Appendices.

## Physical asset object properties

Note: Unlike the AIR Template, a schedule of physical asset objects has not been included in this template. This is because it is generally not practical or sensible to schedule so many items – they are better documented elsewhere.

Assets are best scheduled in the AIR Template because they are confined to a relatively smaller group of assets that require regular maintenance or attention for operational purposes.

Requirement: Include the properties shown in the **Asset object property table** in modelled physical asset objects.

Timing: Include sets of properties at the delivery milestones shown in the **Project information delivery milestones table**.

**Purpose of this table**

This table is used to specify the asset object properties required, based on the project information purposes described in the **Project information purposes table**.

Examples of properties that could be selected are included in *Appendix D – Defining information requirements*.

Note: The table shows the properties required for all physical asset objects. Where they differ for individual groups or classes of assets (commonly the case), create a separate table for each or subdivide the table into classes.

**Selecting properties**

The properties required will be suggested by the purposes described in the **Project information purposes table**.

The number of properties that could be included in each asset object type is virtually unlimited. Including large numbers of properties is rarely necessary or cost-effective. Use a structured process to select the ones required.

The *ABAB Asset Information Requirements Guide* provides guidance on this subject.

The NATSPEC BIM Properties Generator is an ideal tool for selecting object properties.

See <https://bim.natspec.org/tools/properties-generator>

**Asset object property table**

| **Property category** | **Generic property name** | **IFC4 property name or property set** |
| --- | --- | --- |
| **General ID & description** |  |  |
| **Location** |  |  |
| **Parent system or assembly** |  |  |
| **Classification or category** |  |  |
| **Manufacture & supply** |  |  |
| **Warranties** |  |  |
| **Life cycle & maintenance** |  |  |
| **Performance** |  |  |

* Add or delete rows for properties in each property category and edit the descriptions to suit the project. Using IFC property names and property sets will improve the reliability of information exchanges.

Suggested minimum properties for all types of asset objects:

* Asset ID: See **Asset identification**.
* Asset name.
* Classification or category code describing the type of asset, typically from a classification Element, Systems or Products table, e.g. Uniclass 2015, VBIS.
* Location references such as building number, floor level or zone (if not embedded in the ID designation).
* Parent system or assembly code describing ‘part-of’ relationships between assets (e.g. a fan that is part of an exhaust system).

Refer to *ABAB Asset Information Requirements Guide*, Appendices.

# Management

## PIM quality assurance

PIM quality assurance requirements:

Describe the measures required for assuring the quality of project information. Include measures relating to the Common Data Environment (CDE) under **CDE management**.

If the appointing party does not have existing quality assurance requirements for project information, they may choose to request proposals from tenderers for consideration. In this instance, delete the following text about quality assurance standards.

Quality assurance standards: Conform to the standards documented in **Technical, Standards and project reference information**.

## Information security and privacy

Information security requirements:

Describe the measures required for ensuring the security and privacy of project information including governance protocols and responsibilities. This includes but is not limited to technical measures, authorisation processes for access, levels of access, security classification of information, privacy and IP protection measures and procedures in the event of breaches.

Reference the relevant sections of the appointing party’s existing security policies and strategies, security management plans and security breach/incident management plans if available.

Include measures relating to the Common Data Environment (CDE) under **CDE management**.

AS ISO 19650.5 specifies the principles and requirements for security-minded information management. It addresses the steps required to create security strategies, security management plans, etc (but does not provide them ready-made).

## CDE management

CDE standards and procedures:

Describe the measures required to maintain the security and integrity of the CDE. Include applicable standards and procedures in in the **Project information standards directory** and **Project information production methods and procedures directory**.

Incorporate details of these measures in the instructions for using the Common Data Environment (CDE) at **Commercial**, **Common Data Environment**.

If the appointing party does not have existing requirements for management of the CDE, they may choose to request proposals from tenderers for consideration.

# Technical

## Asset identification

Requirement: Provide all assets with a unique code for the purpose of identification and to facilitate the cross referencing of information about assets in different information locations and formats within the PIM.

Give preference to international and national standards for asset identification, e.g. VBIS. See <https://vbis.com.au/>

If this requirement is already covered by standards referenced in **Information standards**, you may choose to delete this clause.

## Model object and property naming

Open standards: To facilitate the reliable exchange of information, use buildingSMART Industry Foundation Classes (IFC) naming conventions for model objects and object properties.

Minimum requirements: Include the IFC designations IfcElementType and PredefinedType in all model element objects.

The *Open BIM Object Standard (OBOS)* provides guidance on creating and naming BIM objects and their properties to facilitate the reliable exchange of information between modellers using different applications.

The NATSPEC BIM Properties Generator includes a list of objects with their IFC designations and property sets.

See <https://bim.natspec.org/tools/properties-generator>

If this requirement is already covered by standards referenced in **Information standards**, you may choose to delete this clause.

## Standards and project reference information

Standards and project reference information location:

Include a link to an online repository, CDE or a description of a location. Ideally, a CDE or single secure location for these resources should be established prior to invitations to tender. Refer to AS ISO 19650-2, Clause 5.1.7. This is more effective and reliable compared to sending them individually to each prospective appointed party.

### Information standards

See *Appendix D – Defining information requirements* for examples of standards and project reference information.

Information delivered for the project: Conform to the information standards and information management standards listed in the **Project information standards directory**.

**Project information standards directory**

| Document title | Edition / version | Date |
| --- | --- | --- |
|  |  |  |
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|  |  |  |
|  |  |  |

Edit to include all specific information standards required for the project by the appointing party’s organisation. Refer to AS ISO 19650.2 clause 5.1.4. Give preference to international, national or industry standards, e.g. AS ISO 19650.

Standards can cover topics such as:

* Requirements associated with information exchanges.
* Schema for structuring and classifying information.
* Methods for assigning level of information need.
* Standards relevant to the use of information during the operational phase of the asset.

The project’s information standards determine the organisation of information containers within the CDE.

### Information production methods and procedures

Information production for the project: Conform to the requirements of the documents listed in the **Project information production methods and procedures directory**.

**Project information production methods and procedures directory**

| Document title | Edition / version | Date |
| --- | --- | --- |
|  |  |  |
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Edit as required to include all specific information production methods and procedures required for the project by the appointing party’s organisation. Refer to AS ISO 19650.2 clause 5.1.

They can cover topics such as:

* The capture of existing asset information.
* The generation, review or approval of new information.
* The security or distribution of information.
* The delivery of information to the appointing party.
* Information acceptance criteria.

### Reference information

Take into consideration the information listed in the **Project reference information directory** when producing information for the project.

**Project reference information directory**

| Document title | Edition / version | Date |
| --- | --- | --- |
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Edit as required to include all available information useful or relevant to prospective appointed parties when tendering and throughout the project. Its provision avoids potential duplication of effort and excessive contingency costs for risks. Refer to AS ISO 19650.2 clause 5.1.6.

It can include – but not be limited to information about:

* The brief.
* Planning and construction approval documentation.
* The site.
* Adjoining assets and utilities.
* Existing assets.
* Guidance material.
* Exemplars of project deliverables, etc.

### Shared resources

Take into consideration, or use as directed, the resources listed in the **Project shared resources directory**.

**Project shared resources directory**

| Document title | Edition / version | Date |
| --- | --- | --- |
|  |  |  |
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Edit as required to include information or resources that promote consistency of information and facilitates its exchange. Refer to AS ISO 19650.2 clause 5.1.6.

It can include – but not be limited to:

* Templates for BEP, TIDP, MIDP, etc.
* Templates for documents, drawings and models.
* Style libraries for text, lines, hatch, etc.
* Object libraries including 2D symbols and 3D objects.

## Additional technical requirements

Refer to the project’s exchange information requirements (EIR) for additional technical requirements.

Delete this cross reference if this document is merged with the EIR.

# Annex

## References

Include any documents that you reference in the PIR here.

**REFERENCED DOCUMENTS**

**The following documents are mentioned only in the *Guidance* text:**

ABAB Asset Information Requirements Guide ABAB 2018 https://www.abab.net.au/

AS ISO 19650: Organization of information about construction works — Information management using building information modelling

Part 1: Concepts and principles

Part 2: Delivery phase of the assets

BS 8536: Briefing for design and construction

Part 1: Code of practice for facilities management (Building infrastructure)

Part 2: Code of practice for asset management (Linear and geographical infrastructure)

Open BIM Object Standard (OBOS) NATSPEC & Masterspec NZ 2018

https://bim.natspec.org/documents/open-bim-object-standard

The Soft Landings Framework Australia and New Zealand CIBSE 2014

<https://www.cibse.org/knowledge-research/knowledge-portal/soft-landings-framework-australia-and-new-zealand>

ISO 19650 Guidance Part D: Developing information requirements UK BIM Framework 2022

<https://ukbimframeworkguidance.notion.site/ukbimframeworkguidance/UK-BIM-Framework-Guidance-20a045d01cfb42fea2fef35a7b988dbc>