

BIM for heritage technical guidance –

HBIM information requirements template suite (HIRS)

Exchange Information Requirements (EIR) – Heritage (HIR\_EIR\_V1)

Information requirements for structured data sets and the application of digital data management and Building Information Modelling (BIM) for heritage asset management

# Project name: Click or tap here to enter text.

Project code: Click or tap here to enter text.

Created in collaboration with:



Exchange Information Requirements – Heritage

How to use this document

This document provides a framework and guidance for developing project-specific exchange information requirements (EIR) specifically for application in a heritage context, and for heritage asset management. The guidance should be applied to all projects to ensure consistent data management across the organisation.

This document is intended to be generic, for use by the whole heritage sector, and to be modified to meet the specific requirements of individual projects or organisations.

This document template provides a framework for completing your own EIR. It includes a full range of potential EIR but should be modified to suit specific organisational or project requirements. The EIR should be concise as possible and if sections of this document are not applicable to your organisation or project, they should be deleted.

Guidance for completing each section is indicated with *italic red text* and should be removed once you have completed your document. All non-italic red text should be reviewed, overwritten, edited or removed according to individual needs.

Before using this document BIM for Heritage: Developing an Asset Information Model (Historic England 2019) should be read.

A glossary of Building Information Modelling (BIM) abbreviations and terminology is provided at the back of this template document.

Exchange information requirements defined

Exchange Information Requirements (EIR) – *information requirements in relation to an appointment.* (ISO 19650-1:2018)

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Exchange Information Requirements – Heritage

# 1 Scope

## 1.0 Document purpose

1.0.1 This document confirms the exchange information requirements (EIR) as a sub-set of the Appointing Party’s requirements or equivalent contract documentation, and introduces information requirements, reasons and purpose to the project team or Appointed Party, along with technical and commercial particulars that need to be addressed to support the implementation of building information modelling (BIM) to heritage projects and heritage asset management.

1.0.2 The EIR are an important element of a project’s BIM implementation, as they are used to set out clearly to the project team or Appointed Party what information (models, documents and structured data) is required, both in general and at each project stage, possibly via a stage-based information delivery plan (IDP).

1.0.3 This document forms part of the H-BIM information requirements template suite (HIRs) produced by Historic England and adopted and amended by xxxxxxxxxxxxxxxxxxxxxxxxx to define the standards and specifications for the use of BIM.

*Insert the Appointing Party or Organisation where indicated.*

## 1.1 Responding to this document

* + 1. The EIR should be responded to by the Appointed Party by including a BIM execution plan (BEP) within the tender submission. This should directly respond to the EIR, using the same layout and reference numbers.

*The Appointing Party may request only certain parts of the EIR to be responded to which must be made clear in the pre-contract BEP.*

* + 1. The BEP (pre- and post-contract) should include the following.
* Specific responses to the EIR with cross-referencing.
* Specific responses to the IDP, including confirmation of ability to deliver the information requirements, in the requested format and to the specified level of information need, or, where delivery is impractical, alternative delivery proposals.
* Project goals for collaboration and information modelling and management.
* Major project milestones consistent with the project programme and IDP.
  + 1. A compliant BEP in support of a project tender will demonstrate how each section of the EIR and IDP will be met. The BEP and its response to the EIR will form part of the tender scoring process and subsequent supplier selection.

## 1.2 BIM vision and objectives

1.2.1 Our BIM vision on project work is to receive the required information deliverables (models, documents and structured data) at the right time and in the required format in order to:

* engage with appropriate stakeholders
* drive project delivery and efficiency
* make the right project gateway decisions
* supply the appropriate information and structured data at project handover, to add to and update the AIM for on-going heritage asset management
* provide the data once and ensure it is available to multiple users thereafter.

*The Appointing Party should amend or update the list of items above to reflect its own BIM visions.*

1.2.2 Our key objective is to use BIM methodologies to ensure the right information is received and correct workflows are followed to develop conservation proposals, deliver high-quality conservation projects and facilitate on-going heritage asset management in accordance with our organisational requirements.

*The Appointing Party should amend or update the key objective (or list of objectives) in accordance with its own BIM objectives.*

*In a heritage context this is a good chance to consider in full the reasons for using BIM and to document this. Suggested objectives include:*

* *accurate 3D digital documentation of heritage assets*
* *a comprehensive, digital record of conservation intervention*
* *structured data sets at project completion to be used for on-going heritage asset management.*

1.2.3 xxxxxxxxxxxxxxxx have defined their organisational information requirements (OIR) and asset information requirements (AIR) in the following documents: xxxxxxx and xxxxxxx.

*Insert the name of the Appointing Party and the names of the OIR and AIR documents where indicated.*

# 2 BIM Information Requirements

## 2.0 Information exchanges and project deliverables

2.0.1 This section communicates the timing and content of information exchanges between Appointed Party and the Appointing Party. It defines how information exchanges are aligned to project work stages. It confirms that information may flow both ways.

2.0.2 xxxxxxxxxxxxxxx work to the xxxxxxxxxxxxx work stages.

*Insert the name of your organisation and its chosen plan of works, such as RIBA Plan of Work 2013 (https://www.ribaplanofwork.com/PlanOfWork.aspx), or an internal project management system/plan of works. These should be aligned with the Construction Industry Council (CIC) stages (http://cic.org.uk/admin/resources/cic-scope-of-services-fqa.pdf).*

2.0.3 While information may be exchanged at any time during the course of a stage, formal published information exchanges should take place prior to the end of a stage to advise gateway decisions.

2.0.4 The frequency of required information exchanges is defined within the IDP.

2.0.5 Information deliverables required at each information exchange are defined within the IDP.

2.0.6 Information deliverables may include:

* 3D models in native discipline (unfederated) and/or open format federated (IFC)
* drawings (extracted from models where models exist) in PDF and DWG format
* documents (reports, surveys, O&M manuals) in PDF and native format
* structured data in an agreed format, such as COBie for BIM Level 2 or alternative information and data exchange templates in XLS format.

Structured data may involve manual entry in the case of a Heritage BIM workflow and procurement for the development of an AIM, or automatic entry from data models.

## 2.1 Information delivery plan

2.1.1 A project-specific IDP has been produced and is appended to this EIR: xxxxxxxxxx

*Insert the document names where indicated*

The design team or Appointed Party should review this plan and confirm its ability to provide the information using appropriate resources, in the appropriate formats and at the appropriate stage decision gates.

2.1.2 It is intended that the Appointing Party’s IDP should be used to develop the Appointed Party’s master information delivery plan (MIDP) for preparation and submission of information to the Appointing Party at the appropriate stages.

2.1.3 Any proposed variation from or addition to the IDP should be made clear to the Appointing Party within the Appointed Party’s pre-contract BEP.

## 2.2 Level of information need

2.2.1 The level of information need defines the level of maturity required for a particular information deliverable at a particular plan of work stage. It provides a framework that defines the extent and granularity of information and helps to prevent the delivery of too much information.

2.2.2 xxxxxxxx have selected the following level of information needs standards for this project:

xxxxxxxx

xxxxxxxx

*Insert references to the level of information needs standards where indicated.*

*Standards that may be used include:*

*2018 Level of Development (LOD) Specification Part I and Commentary For Building Information Models, and Part II (BIMForum 2019a, b)*

[*https://bimforum.org/wp-content/uploads/2018/09/BIMForum-LOD-2018\_Spec-Part-1\_and\_Guide\_2018-09.pdf*](https://bimforum.org/wp-content/uploads/2018/09/BIMForum-LOD-2018_Spec-Part-1_and_Guide_2018-09.pdf)

*BIM for Heritage: Developing a Historic Building Information Model (Historic England 2019b) that includes suggestions for levels of detail developed specifically for historic buildings.*

## 2.3 Health and safety and construction (design and management)

2.3.1 Information deliverables in respect of health and safety (H&S),construction design and management (CDM) are detailed in the IDP. The Appointed Party should confirm how these will be used to meet its obligations under the Construction (Design & Management) Regulations 2015 within their pre-contract BEP. Refer to PAS 1192-6:2018.

# 3 Management

## 3.0 Standards

* + 1. This section defines the BIM standards that are incorporated into the information requirements.
    2. The core documents that are to be used on this project are:
* ISO 19650-1:2018
* ISO 19650-2:2018
* PAS 1192-3:2014
* PAS 1192-4:2014
* PAS 1192-5:2015
* PAS 1192-6:2018
* BS 1192:2007
* PAS 55-1:2008

Supplementary guidance providing heritage-specific standards will also be used:

* *BIM for Heritage: Developing a historic building information model* (Historic England 2017)
* *BIM for Heritage: Developing the asset information model* (Historic England 2019b)
* BIM for heritage technical guidance: HBIM information requirements template suite (HIRs) (Historic England 2019a, c)

## 3.1 Roles and responsibilities

3.1.1 This section should bring to the attention of the project team the allocated roles associated with information management.

3.1.2 The roles themselves are addressed in the specific appointments.

3.1.3 The roles to be taken on directly by the Appointed Party include:

xxxxxxx

*Insert the roles where indicated.*

*Refer to ISO 19650-2:2018 Annex A for an information management assignment matrix*

3.1.4 Roles to be taken on directly by the Appointing Party include:

xxxxxxx

*Insert the roles where indicated.*

*Refer to ISO 19650-2:2018 Annex A for an information management assignment matrix*

## 3.2 Collaboration process

3.2.1 This section defines how, where and when project information will be shared.

3.2.2 The project team or Appointed Party is expected to manage the project’s CDE at each stage of the project. The management and systems providing this service may change with the appointment of different project teams or suppliers for different stages or phases. However, there will only be one project CDE in operation at any one time to avoid duplication of information and to ensure one single source of truth.

3.2.3 Details of the collaboration process sufficient to demonstrate competence and capability shall be provided in the pre-contract BEP, with full details provided in the post-contract BEP.

3.2.4 The BEP shall include:

* the process and format of information exchanges at project work stages
* the frequency of collaboration and information exchange
* proposals to manage restrictions around the sharing of data and information in connection with the Appointing Party’s security requirements
* details of how the requirements of the IDP will be met and tracked
* the extent and form of model coordination and federation
* details of model review workshops and other collaborative working practices, eg use of model federation and coordination at design and/or site meetings.

## 3.3 Modelling process and data segregation

3.3.1 The purpose of this section is to set out requirements for the bidder’s proposals for the management of the modelling process.

3.3.2 Information should be managed in accordance with the processes described in ISO 19650-1:2018, ISO 19650-2:2018 and PAS 1192-5:2015.

3.3.3 The IDP confirms the information delivery, information packaging and information exchange requirements for models, documents and data. All published transmittals shall be accompanied by a COBie spreadsheet (or agreed alternative information and data exchange template) confirming the included exchange files.

3.4.4 Where the Appointing Partyhas specific requirements for work management, including security aspects, the requirement and request for proposals is identified on a project-specific basis or as part of the IDP.

3.4.5 The following are required and should be confirmed in the BEP.

### Model management

* Details of the management and quality-assurance processes coordinated by the information manager.

### Volumes, zones and areas

* Definitions of zones and the management of adjacency within the discipline models,
* Confirmation of the definition of the project volume structure.
* Confirmation of the volume- or space-naming convention to be adopted.
* Requirements in connection with the use of separate project volumes for sensitive assets and systems.

### Naming conventions

In order to comply with the requirements of the OIR and AIR standards, consistent adoption of the xxxxxxxxxxxxxnaming convention will be confirmed and applied from the outset, where each site, building asset, floor, space, system and component will be identified, classified and categorised in accordance with the required standard.

*Insert the name of the convention to be used where indicated.*

There will be an agreed and consistent space-naming convention for space type, and project-specific nomenclature.

The file classification and naming convention approved by xxxxxxxxxxxxxshall be adopted for all projects, irrespective of size, value or complexity.

*Insert the name of the approver where indicated.*

The file naming convention shall be used for all document types uploaded to a CDE, in line with IEC 82045-1 and BS 1192:2007(A2) 2016, as below:

* xxxxxxxxx
* xxxxxxxxx

*Insert the details of the organisation-specific file-naming conventions, with examples.*

### Publishing processes

The use of the following procedures should be confirmed in the pre-contract BEP. Any deviation from these procedures should be expressly stated with reasons for the change.

* The contents of stage information exchanges are defined in the IDP and expanded upon in the corresponding MIDP.
* These will be published by the Appointed Party’s information manager from the appropriate CDE to complete the particular delivery stage.
* Data delivered at key work stages will be accompanied by a COBie file (or alternative agreed information and data exchange template), which will be used to validate the delivery.
* The Appointed Party’s information manager will notify the appointing party’s information manager once all required data deliverables have been uploaded to the CDE.
* The Appointing Party’s information manager will validate the data and produce a red, amber, green (RAG) acceptance report to the appointed party’s information manager.
* Green packages will be published into the appointing party’s CDE published file area and the COBie data (or alternative information and data) and file linkages published into the Appointing Party’s CDE data area for onward use.
* Amber or red packages should be remedied by the appointed party.
* Acceptance of failure and resubmission of deliverables in accordance with the IDP is unlikely to cause a variation/compensation event.

*The Appointing Party should review the suggested publishing process above and amend or rewrite in accordance with its own requirements.*

## 3.4 Security

* + 1. The purpose of this section is to communicate client-specific security measures in order to secure the data.
    2. For all built assets, specific security measures related to information exchange will be identified on a project-specific basis and communicated to the supply chain accordingly. Specific requirements will be noted in the IDP.
    3. The tender submission should demonstrate the Appointed Party’s compliance with any mandated security requirements. The BIM execution plan will set out compliance processes and the means by which compliance is monitored and managed to delivery against these security requirements.
    4. *Enter specific security requirements and instructions here*

## 3.5 Coordination and clash detection process

3.5.1 The purpose of this section is to ask the supplier to define its coordination process, in order to meet Appointing Party requirements for quality control.

3.5.2 The following details of the coordination and clash detection process should be detailed in the pre-contract BEP and may include the following:

* associated software
* process overview
* responsibilities
* outputs
* proposed workflow and systems for verifying generated and received project data
* proposed workflow and systems for validating generated and received project data
* tolerance strategy
* clash resolution process
* verifying technical queries to the Appointed Party (files and data in place), validating suitability of data content with Appointed Party
* proposal for quality assurance and liaison with the Appointing Party/end-users when incorporating project information model (PIM) data into an AIM (for facility management operations and other heritage asset management purposes)
* how this process will align with the Appointing Party’s contractual and process requirements, such as on-going/periodic technical review.

*The Appointing Party should consider the suggested list of co-ordination and clash detection processes and amend or re-write to meet their own project or organisational requirements.*

## 3.6 Compliance plan

3.6.1 The purpose of this section is to enable the Appointed Party to communicate how the integrity, and hence quality, of the model and other data sources will be maintained.

3.6.2 All published information exchanges will be validated using the included COBie (or other information and data exchange template) file against the IDP for the stage information exchange. Only compliant exchanges will be accepted.

3.6.3 The Appointed Party should confirm its own internal model file and data standards and compliance procedures, including references to standards and compliance software in the BEP.

3.6.4 This should refer to:

* quality assurance/control procedures
* associated software
* period of aftercare (the number of years that the model should be managed for)
* security and information assurance requirements.

3.6.5 The Appointing Party or Appointing Party’s project or information manager should be given reasonable access to the appointed party’s CDE to enable compliance monitoring and audits.

3.6.6 The Appointed Party shall confirm its quality assurance processes for data, models and documents.

## 3.7 Delivery strategy for asset information

3.7.1 This section defines the information exchange standard for asset information, and enables the Appointing Party to obtain proposals with regard to asset information delivery into the Appointing Party’s facility or asset management environment.

3.7.2 The information exchange format for provision to the AIM will be as defined in the Information Delivery plan transmitted and contained in the published information exchange COBie file (or bespoke information and data exchange template) together with associated exchange information files.

3.7.3 xxxxxxxxxx uses the following systems/databases/information formats. The Appointed Party should demonstrate its ability to provide the information requirements for these systems:

xxxxxxxxx

xxxxxxxxx

*Insert the name of your organisation and the names of the systems, databases and information formats used by your organisation where indicated.*

3.7.4 Where practicable, a COBie excel sheet data structure (or another bespoke information and data exchange structure in XLS format) shall be used as the default exchange format for all project-related information, whether 3D modelling is involved or otherwise.

## 3.8 Master information delivery plan and project plan

3.8.1 The following approach should be used by the Appointed Party to ensure information coordination and consistency.

3.8.2A MIDP, should be prepared by the supplier in response to the IDP and should follow a similar or related format.

.8.3 A project plan (PP), which will be provided to the Appointed Party to allow an appreciation of the strategic programme intended for the project and to enable the development of the Appointed Party’s programme proposal.

3.8.4 In the absence of a Project Plan, the IDP will be used by all team members to manage and monitor progress and information delivery for the duration of the project.

## 3.9 Training

3.9.1 The purpose of this section is to provide bidders with details of training that will be provided in connection with project systems, or training requirements that the bidder will be required to deliver as part of its appointment/contract.

3.9.2 The Appointed Party shall confirm the training that it will provide for its tools and systems that the Appointing Party and others will be expected to use.

3.9.3 The Appointed Party will be responsible for maintaining and delivering appropriate information handling and access training to all interfacing parties, including any Appointing Party staff, for operation of and access to the Appointed Party’s CDE.

3.9.4 Training for access and operation to the Appointing Party’s CDE will be provided by the Appointing Party to interfacing Appointed Party staff as required. If proprietary model viewing software is proposed in variance to that shown as held by the Appointing Party in this document, then reasonable access and training is to be provided by the Appointed Party at no cost.

3.9.5 Any general security awareness and induction requirements, as well as any role-based security requirements, will be highlighted to the Appointed Party on a project specific basis, and set out in the Appointing Party’s built asset security management plan (BASMP).

3.9.6 Information should be progressively shared and published from the supplier CDE to the employer CDE so that in normal circumstances the employer will not need access to the supplier CDE other than for compliance purposes.

*This section should be reviewed and amended by the Appointing Party to reflect the training requirements of the specific project.*

# Technical

## 4.0 Software platforms

4.0.1 The purpose of this section is to communicate the software platforms and versions where they are known and where they might influence the preparation of a bid.

4.0.2 Platforms and versions used by the Appointing Partyinclude:

* CDE
* model authoring software
* model federation and viewing software
* xxxxxxx.

*Insert the name of the Appointing Party and list the details of the CDE, model authoring software, model federation and viewing software and any other software platforms deemed necessary, where indicated.*

4.0.3 The ability of the bidder to work with these platforms should be made clear in the response.

4.0.4 Designers and constructors should align their model attribute data with the data exchange format indicated by PAS 1192-4:2014.

*If a specific data exchange format is required (such as the heritage information and data exchange template), this should be noted.*

4.0.5 The BEP should confirm the process of data compilation between the model and COBie (or other data exchange format as defined).

4.0.6 The Appointing Party should confirm how data and information from its BIM-authoring tools will be prepared and published so that it can be used within the software platforms outlined above.

## 4.1 System performance

4.1.1 This section communicates constraints in the Appointing Party’s information technology (IT) systems and/or any specific IT requirements that may need additional resources or non-standard solutions.

4.1.2 IT system restrictions and requirements should be taken into consideration when completing the BEP.

4.1.3 The following Appointing Party’s restrictions and requirements should be considered:

* + model size

*Insert any model size restrictions where indicated.*

* + software uses

*Insert any software details where indicated, such as IFC-federated model visualisation can be viewed in the Appointing Party CDE.*

*Insert any security issues where indicated.*

* + security issues

## 4.2 Data exchange format

4.2.1 This section defines the formats used for delivery information/data exchanges. Information will be required in a format as specified in the IDP and may include any of the following:

* native, 3D discipline model files for all design and analysis models (individual and unfederated), xxxxxxxxxx
* common file format, such as IFC, xxxxxxxxxx
* COBie or other bespoke information and data exchange template, xxxxxxxxxx
* PDF files, xxxxxxxxxx.

*Insert any requirements and software versions where indicated.*

## 4.3 Co-ordinates

4.3.1 It is encouraged that a common co-ordinate system is adopted for all BIM data. This section defines the requirements for a common co-ordinate system to be applied to all BIM data.

4.3.2 The minimum requirement is spatial co-ordination, to be stated as follows:

* + intersection of grids XX and YY, xxxxxx.xxxE and xxxxxx.xxxN
  + intersection of grids AA and BB, xxxxxx.xxxE and xxxxxx.xxxN
  + ground floor FFL, xxx.xxx.

*Insert the requirements where indicated.*

4.3.3 Other co-ordination standards defined in the BEP should include:

* + origin rotation
  + offsets
  + datum information
  + units to be used.

4.3.4 3D geolocation co-ordinates to be shown to no less accurate than 10mm (0.01m) in all directions.

*The above section provides an outline of suggested co-ordinate requirements. These should be updated, amended, removed, to suit the specific requirements of your project or organisation.*

# Commercial

## 5.0 BIM execution plan

5.0.1 The Appointed Party shall prepare, deliver and maintain a BEP for the project that responds directly to these EIR using correlating section references.

5.0.2 The Appointed Party shall review its BEP regularly and additionally when there is any change to its contract.

5.0.3 Pre- and post-BEPs are to be provided in response to the EIR identifying the Appointed Party proposals clause by clause. The pre-contract BEP will be scored as part of the tender submission.

## 5.1 BIM-specific competence requirements

5.1.1 This section details the information that a bidder/Appointed Party should provide as part of a tender submission in order to demonstrate BIM capacity and experience.

5.1.2 Responses should describe the BIM maturity and capabilities of the bidding organisation, including specific examples and with reference to the standards stated in this EIR.

5.1.3 Tenderers should include the following details:

* organisational BIM culture and approach
* organisational and personnel BIM experience, skill and competency
* BIM capability including examples of previous BIM experience in accordance with the standards stated in this EIR
* security understanding, capability, competence and experience
* details of any out-sourced BIM-related roles.

*The Appointing Party should amend the list above and add any further specific requirements as necessary.*

## 5.2 Confirmation of BIM toolset

5.2.1 Responses will describe the processes and procedures that make up the bidder’s BIM and information management toolkit, specifically where this is in accordance with the standards stated in this EIR.

5.2.2 Tenderers should include detail on procedures aligned with the core project stages as follows:

* ISO 19650-1:2018
* ISO 19650-2:2018
* PAS 1192-3:2014 (where applicable)
* BS 1192-4:2014 (or other bespoke processes).

*The Appointing Party should amend the section above to suit project- or organisation-specific requirements.*

## 5.3 Details of BIM workload and resourcing

5.3.1 Responses should describe the resources (and levels) that are available to the project.

5.3.2 Tenderers should include the following detail:

* resource matrix with level, number and utilisation
* outsourcing details or services.

*The Appointing Party should review and amend according to the detail they wish to receive from tenderers.*

## 5.4 Principal supply chain

5.4.1 Responses will describe the supply chain’s ability to link into the process and how this will be assessed.

5.4.2 Tenderers should/might include the following detail:

* key supply chain partners
* expected outputs
* assessment process.

*The Appointing Party should review and amend the list to include whatever detail they require the tenderer to provide*

# Glossary

|  |  |
| --- | --- |
| AIR | Asset Information Requirements, define the data and information required throughout the asset lifecycle |
| Appointed Party | Provider of information concerning works, goods or services |
| Appointing Party | Receiver of information concerning works, goods or services from a lead Appointed Party |
| BAS | Building Automation System |
| BASMP | Built Asset Security Management Plan |
| BEP | BIM Execution Plan defines the strategy for project delivery using BIM |
| Bidder | Company or organisation wishing to provide information concerning works, goods or services. Bidding to become the Appointed Party |
| CDE | Common Data Environment, the framework used to support interdisciplinary collaboration through BIM that specifies a single source of information for the project, used to collect, manage and disseminate project information through strictly controlled processes |
| CDM | The Construction (Design & Management) Regulations (CDM 2015) are the main set of regulations for managing the health, safety and welfare of construction projects |
| CIC | Construction Industry Council, the representative forum for the professional bodies, research organisations and specialist business associations in the construction industry |
| COBie | Construction Operations Building information exchange, a data-exchange format that supports the exchange of information about new and existing buildings and infrastructure throughout their life cycle |
| Constructor | A person or company that builds assets |
| Designer | A person or company that designs assets |
| DWG | Proprietary binary file format used by Autodesk® for storing two- and three- dimensional design data and metadata |
| EIR | Exchange Information Requirements, pre-tender document setting out the information requirements in relation to an appointment |
| Employer | The person or organisation responsible for initiating a project /Appointing Party |
| End-user | The person or organisation that will use the supplied information |
| Gateway decision | A key decision point in a design and construction project |
| Granularity of information | The level of detail considered in a model or decision making process |
| H&S | Health & Safety, the laws, rules, and principles intended to keep people safe from injury or disease at work and in public places |
| IDP | Information Delivery Process |
| IFC | Industry Foundation Class, an object-based open standard for the exchange of BIM information between different software. Developed by ‘buildingSMART’, a global alliance specialising in open standards for BIM, IFC is an official standard, BS ISO 16739, and contains geometric as well as other data |
| IT | Information Technology |
| MIDP | Master Information Delivery Plan |
| O&M | Operation and maintenance, the daily activities and services needed to ensure an asset performs to its intended function |
| OIR | Organisational Information Requirements establish and categorise the information requirements to meet the needs of an organisations asset management system |
| Organisation | An organised group of people with a particular purpose, such as a business, government department or charity e.g. a heritage trust |
| PIM | Project Information Model developed during the design and construction phase of a project which often forms the basis of the asset information model |
| RAG | Red Amber Green |
| Single source of truth | The practice of structuring information models and associated data into a master, single source so that data is only edited in one place |
| Stage decision gates | A point in a design and construction project stage at which a key decision is required in order to progress – a gateway decision |
| Supplier | Company or organisation wishing to provide information, goods or services. Bidding to become the Appointed Party. See also, Bidder and Tenderer. |
| Tenderer | Company or organisation wishing to provide information concerning works, goods or services. Bidding to become the Appointed Party. See also, Bidder. |
| XLS | Proprietary file format created by Microsoft® for storing spreadsheet information |