BIM Level 2 Guidance: UK edition

1.0 Commercial:

This section examines the commercial documents which enable projects to be set up effectively for BIM Level 2:

BIM Protocol. A universal addendum to appointment documents and construction contracts that puts in place additional rights and obligations associated with Building Information Models – includes guidance note and model contract amendment.

Employers Information Requirement. A template setting out the information needed to define information and other client requirements for a project delivered using Building Information Models – includes guidance and pre-qualification documentation for consultants and contractors.

Scope of Services for Information Management. A scope of services for Information Management activities that is designed to be appended to an existing appointment – e.g. Design Team Leader. Information Management is referenced in the BIM Protocol and promotes the adoption of the Common Data Environment described in PAS 1192:2. Versions have been prepared for use with stand-alone schedules of service and the CIC Schedules of Service.

Insurance Guidance Note. Advisory note for insured parties prepared following consultation with the insurance industry

These BIM project documents have been designed to be used as a suite and relate closely to one another. The Employers Information Requirements is the source of most information required to compile the BIM Protocol, and the BIM Protocol requires the appointment of an Information Manager and encourages the adoption of the Common Data Environment and other aspects of PAS 1192:2. By using the BIM commercial documents in combination, employers will benefit from greater efficiency and will encourage the adoption of collaborative behaviours that will further increase the value obtained from BIM.

1.1 BIM Protocol

Overview

The BIM Protocol is a supplementary legal agreement that is incorporated into professional services appointments and construction contracts by means of a simple amendment. The Protocol creates additional obligations and rights for the employer and the contracted party. The Protocol is based on the direct contractual relationship between the employer and the supplier. It does not create additional rights or liabilities between different suppliers.

The CIC BIM Protocol has been designed to be used by Construction Clients and Contractor Clients. It is possible that consultants and contractors will use a version of the Protocol in manage the work of subjects and subjects information Models on The key phaltiple of the production of Blind Political and the production of Blind Politi

- The same version of the Protocol and Appendices should be incorporated into each contract.
- The wording of the CIC BIM Protocol should not be amended
- The Protocol should detail all Building Information Models that are going to be produced by all parties contracted to the employer on the project
- The Appendices have to be completed with project specific information for all projects. This should be available from pre-appointment documentation such as the Employer's Information Requirements.
- Changes to the Protocol and its Appendices should be treated as variations to the Contract

The CIC BIM Protocol Appendices are the only documents which need to be completed with specific project details.

Appendix 1 – Model Production and Delivery Table. This must include references to all Building Information Models that are required by the employer at each project stage.

Appendix 2 – Information Requirements. This details the information management standards that will be adopted on a project.

All Project Team Members should have an identical CIC BIM Protocol and Appendices.

The CIC BIM Protocol is incorporated into an appointment or contract using a simple amendment.

FAQs

Q: Why does a Project need to include a BIM Protocol?

A: Use of the BIM Protocol provides a contractual wrapper to the additional activities which will take place on a project delivered using BIM.

The BIM Protocol creates the obligation for suppliers to provide specified BIM at defined levels of detail. Without the Protocol, there is no means of enforcing the production of models as required under the Government BIM Strategy. The Protocol also provides necessary additional protections for the producers of information through the inclusion of BIM-specific licences. The Protocol also makes a major contribution to encouraging effective collaborative working by mandating the role of Information Manager and by including provisions which will make the use of Information Management standards such as PAS 1192:2 an explicit contractual requirement.

Q: The Protocol requires the Employer to put the Protocols in place, complete the appendices and to appoint to the role of Information Management. Are these obligations really necessary?

A: The employer has a key role in setting up a BIM Project for success. By ensuring that all consultants and the contractor are appointed on a common basis, are working to deliver a common set of Building Information Models and are contractually required to adopt common ways of working, the employer will make a great contribution to effective project working. Because the CIC BIM Protocol gives model originators additional protection — project participants will be incentivised to agree to the Protocol. Similarly, the content of the Appendices has to be included in the Employer's Information Requirements prior to

appointment. The appointment of the role of Information Management will be an extension of an existing appointment, not an additional role.

Q: What happens if the Models required change during the contract?

A: The Model Production and Delivery Table will need to be updated. The change should be managed through the project's Change Management system. A change to the Appendix is unlikely to result in a variation/compensation event. However the requirement for changes to Models themselves may have a cost/programme implication.

Links

The BIM Protocol

BIM Protocol Appendix 1

BIM Protocol Appendix 2

1.2 BIM Employer's Information Requirements (EIR)

Overview

The Employer's Information Requirements (EIR) form part of the appointment and tender documents on a BIM Project.

Information Requirements need to be defined as part of the Employer's Requirements. The EIR define which models need to be produced at each project stage – together with the required level of detail and definition. These models are key deliverables in the 'data drops' – contributing to effective decision making at key stages of the project. The content of the EIR covers three areas:

- Technical details of software platforms, definitions of levels of detail etc
- Management details of management processes to be adopted in connection with BIM on a project
- Commercial details of BIM Model deliverables, timing of data drops and definitions of information purposes

Technical	Management	Commercial
 Software Platforms Data Exchange Format Co-ordinates Level of Detail (general) Level of Detail (components) Training 	Standards Stakeholder Roles and Responsibilities Planning the Work and Data Segregation Security Coordination and Clash Detection Process Collaboration Process Model review meetings Health and Safety and Construction Design Management System Performance Constraints Compliance Plan Delivery Strategy for Asset Information	Timing of data drops Clients Strategic Purpose Defined BIM/Project Deliverables BIM-specific competence assessment

The EIR is presented as a model document complete with guidance models. The content can be incorporated into other tender documentation. The content of the model EIR is advisory. As the BIM protocol requires details of Building Information Models and Information Management processes, the EIR provides an effective platform to communicate these requirements as part of an appointment process.

FAQs

Q: The EIR is a complex technical document. Who will be able to assist the Employer in compiling the EIR?

A: The Design Team Leader and Project Lead are well positioned to provide support in compiling the EIR.

Q: Does the Employer need to follow the format and content set out in the model EIR?

A: It is not strictly necessary to follow the content of the model EIR. However, a large portion of the EIR content is essential to define effective ways of working, including: Level of Detail, Planning the Work and Data Segregation, Security and BIM deliverables. Following the model EIRs helps to ensure that all information required by the Project Team will be readily available.

Example EIR coming soon.

1.3 Scope of Services for Information Management

Overview

The role of Information Management is mandated in the BIM Protocol. The Employer is required to name a party to deliver Information Management Services.

The Information Management role should be delivered as part of an existing appointment. By defining the Information Management role, the CIC is describing the activities that are already required to deliver coordinated Project Information. The CIC has taken the step to draft Information Management duties for the following reasons:

- To describe the role mandated in the BIM Protocol
- To describe a range of activity that is consistent with the requirements for the delivery of 'data drops' and the management of project information in accordance with PAS 1192:2
- To motivate the development of Information Management skills in support of the BIM Strategy

The role has three principal components:

- Managing the Common Data Environment
- Project information management
- Collaborative working, information exchange and project team management

None of the activities undertaken in the role of Information Management involve taking on design responsibility. However, the role can be undertaken by a Project Team Member with design responsibility such as the Design Team Leader or Main Contractor.

Hosting Services associate with the common date environment are described as an additional service.

Two versions of the Scope of Services have been prepared.

- Outline Scope of Services for Information Management. This document is suitable
 for detailing the role in projects where each party has a discretely defined scope and
 appointment. The scope is based on the general obligations of the coordinated
 services document.
- Coordinated Scope of Services for Information Management. This scope is compatible with the CIC Scope of Services. The content in the schedule will be added to the CIC Scope at the next revision. This will be published shortly.

FAQs

Q: Does an Information Manager need to be appointed on a BIM project?

A: The Information Manager has a key role in setting up and managing the Common Data Environment (CDE). The CDE is a critical tool for effective collaboration, quality control and avoidance of waste. Due to the importance of Information Management to the BIM Strategy the role is mandated in the BIM Protocol. Clear communication of these responsibilities will help to accelerate the development of skills necessary to manage projects using processes set out in PAS 1192:2

Q: Is the Information Manager a stand-alone appointment? What skills are needed in the role?

A: The BIM Task-Group anticipates that the role will be incorporated into existing appointments. The best fit is with either the Design Team Leader or the Project Lead. However, the skill set required is focused on management disciplines – there is no design responsibility. As a result, other disciplines could potentially undertake the role. Only in exceptional circumstances should a stand-alone appointment be considered by the employer.

Q: Is the Information Manager responsible for all information, or just Building Information Models?

A: The Information Manager is responsible for the establishment of the Common Data Environment which is used to exchange all project information, not just Building Information Models.

Q: Is the Information Manager role the same as a BIM Consultant?

A: BIM Consultants typically contribute to Information Management through the establishment of model standards and execution plans. In addition to the information management roles described in the scope of service, BIM Consultants typically undertake coordination and clash detection in connection with models. Coordination and clash detection is part of the design coordination activities undertaken by the design team lead and is excluded from the scope of the role of the Information Manager. A design team lead can however undertake both Information management and design coordination.

Employers are advised to avoid blurring design responsibility through the direct appointment of BIM Consultants to undertake model coordination. Use of sub-consultancy appointments under an existing design consultant appointment will maintain the existing allocation of design responsibility.

Links

Outline Scope of Services for the Role of Information Management

1.4 Professional Service Indemnity Insurance Guidance

Overview

Professional Indemnity Insurance Guidance has been prepared for the CIC following extensive consultation with the Insurance Industry. The consultation found that there were no perceived issues that would prevent designers from obtaining PI insurance when working on projects delivered at BIM Level 2.

Feedback from insurers obtained during the consultation confirmed the widely held view that improved information quality and design coordination that can be secured using Building Information Models provides further incentive for insurers to support their clients in the design and construction markets.

The guidance produced on behalf of CIC by insurance brokers, Griffiths and Armour, sets out the simple steps that insured parties should take when obtaining PI insurance cover for projects where some or all of the design is being delivered using BIM.

Links

Best Practice Guide for Professional Indemnity Insurance