



### The CIC BIM Protocol

The [CIC Building Information Modelling Protocol](#) will be launched on 28 February 2013, along with guidance for the insurance industry and an outline scope of services for information management.

The Protocol provides the legal framework which will facilitate and promote the use of building information modelling (BIM), a technology which will radically change construction practices, while at the same time producing substantial savings. For this reason, BIM is being promoted heavily by Business Innovation and Skills (BIS). The declared aim of BIS is that it will be used for all public procurement (up to a defined level of expertise – Level 2) by 2016. Consequently, BIS has provided the funding for the development of the CIC BIM Protocol and is heavily engaged in furthering the take up of BIM within different sectors and at levels of government.

The Protocol is a contractual document which takes precedence over existing agreements. Within the objective of making minimal changes to pre-existing contractual obligations, it places an obligation on parties to provide defined elements of their services using models at defined stages in a project. The Protocol encourages collaborative working methods within project teams and it operates within the adoption of common standards as exemplified in PAS 1192-2, which has also been finalised and is launched in conjunction with the BIM Protocol and its attendant documents.

Key elements of the Protocol are:

- The requirement on the Employer to appoint a party to undertake the role of information management.
- The use of the general concept of “permitted purpose” to define the licensed uses of models.
- The licences in the Protocol include the right to grant a sub-licence on identical terms to members of the Project Team and their sub-contractors.
- Licences do not include the right to amend material without consent.
- Proprietary rights in any material in a model remain with the Project Team Member.
- The Protocol aims to remove the need for separate Electronic Data Exchange Agreements. A team member does not warrant the integrity of any electronic data delivered in the models.

- Models are scheduled in the Model Production and Delivery Table (MPDT), which is an appendix to the main Protocol. This outlines responsibility for preparing the model(s) and identifies the Level of Definition (LODs).
- Variations to the MPDT or Protocol should be subject to the Change of Management procedure under the Agreement.
- Examples of many aspects of the protocol and other documents (e.g. MPDT, model amendments to contracts) are hosted on the BIM Task Group website ([www.bimtaskgroup.org.uk](http://www.bimtaskgroup.org.uk)). An editable version of the Protocol appendices is also available from this website.
- BIM is an on-going process and there is a requirement on the employer to review and update both the Information Requirements and the Information Management Role, as the project progresses.
- Appendix 2 of the Protocol sets out the generic Information Requirements such as the standards which are applied, the common data environment, the project procedures and the co-ordinating system.

The CIC BIM Protocol has been prepared by Beale & Co, following extensive consultation with members of CIC, via the Liability Panel, and also additional consultation with end-users in the wider construction industry.

### **BIM – the insurance aspect**

In addition to funding the CIC BIM Protocol - BIS also requested CIC to produce a [Best Practice Guide](#) dealing with those aspects of BIM which relate to Professional Indemnity (PI) insurance. This guide, published in tandem with the main CIC BIM Protocol, has been written by Griffiths & Armour.

Following extensive consultation within the PI industry, the overall conclusion reached was there did not seem to be any obvious issues with Level 2 BIM which would “materially alter the risk profile presented by the consultant and, therefore, the premium implications will be minimal”. The Griffiths & Armour document, however, does state that Level 3 BIM would raise very different liability issues. “Level 2 BIM”, broadly means a “federated” model, albeit in a managed 3D environment, perhaps with 4D construction sequencing and/or 5D cost information. Level 2 BIM requires each participant to develop their own model or models which are then shared with the project model with appropriate audit trails in place.

This insurance document contains the suggestion that the first time BIM is used, contact should be made with the PI broker to ensure that he or she understands that only Level 2 BIM is being used and also that there are no policy terms which may cause trouble. This is particularly so: if the insured party is undertaking an information management role; if a BIM co-ordinator is employed as a sub-consultant or; if there is a “hosting” element in the BIM environment.

The document considers some typical policy wording which, while it may not make reference to BIM as such, could impact the coverage offered by the policy. One particular issue which is addressed is “hosting” a BIM model or models. The document suggests that existing PII arrangements will not be sufficient and this issue should be discussed with the broker.

In relation to the CIC BIM Protocol, it is noted that that this document “is accepted as being best practice”. Griffiths & Armour recommend that bespoke protocols should be resisted. It is acknowledged however that BIM is in the early days of development and that this issue may be best dealt with on a case by case basis.

Furthermore, the insurance document contains interesting observations on working within a BIM environment. One crucial aspect is level of detail, in that there is a potential pitfall in taking the design too far along and designing beyond the level of detail required for a particular stage in a project. For instance, this could happen in the case of sub-consultants who are not part of the core Project Team and who may not have had to sign up to the BIM Protocol. It may also be the case that sub-consultants may not be utilising BIM enabled software and may continue to work in a traditional CAD environment. For this reason, the CIC BIM Protocol includes a provision that Project Team Members should require sub-consultants to enter the protocol so as to enable the lead consultant to comply with the Protocol.

The insurance guide also contains a timely reminder on the hazards of using automated model checking software packages, such as those designed to monitor compliance with the Building Regulations. Such software should be used proportionately without undue reliance being placed on it.

Overall, the conclusion is that Level 2 BIM work, conducted under the CIC BIM Protocol, within the disciplines of standards such as PAS 1192-2, under the control of a Information Manager will provide sufficiently clear lines of responsibility and an audit trail to satisfy insurers.

### **Other BIM related documents**

Another document in the batch published by CIC on 28 February 2013, outlines the [role description of information management](#) which may be included within a Scope of Service Agreement. This sets out the duty to: establish a common data environment; establish agree and implement the information structure, enabling integration and co-ordination of information and; agree formats for outputs.

The current edition of the CIC Scope of Services is being updated in line with the work being done with the BIM Task Group. The new edition will be adjusted to make the Scope of Services equally applicable to infrastructure and building projects. Work is also proceeding in relation to plan of works. The new RIBA Plan of Work is due in May 2013. Its seven stages are closely aligned to the current CIC version. An integrated Digital Plan of Work is also a major objective of the BIM Task Group.

## **Infrastructure delivery**

The Government has published for consultation, a set of guidelines and tools to support the capability of public and private sector infrastructure providers, with the aim of improving the delivery of large scale projects and programmes.

Developed by Infrastructure UK in collaboration with academics from the University of Leeds the "[Infrastructure Procurement Routemap](#); a Guide to Delivering Capability", sets out a coherent approach to assessing and building an effective delivery environment, combining best practice tools and using case study examples such as that of Crossrail.

This 'Procurement Routemap' recognises that while there is no "one size fits all" solution to the delivery of our infrastructure, there are common characteristics for effective delivery that must be applied more consistently. The toolkit has already been successfully piloted. It has been shown to improve efficiency by providing a structured framework for project sponsors and clients to take a look at their capability and highlight areas for improvement.

The launch of the toolkit forms part of the Government's Cost Review programme, led by Infrastructure UK, which aims to improve delivery and make efficiency savings of at least 15 per cent by 2015.

The closing date for consultation on the draft toolkit is 22 April 2013.

## **Housing guarantees**

The Government has revealed details of how it will operate its housing guarantee schemes for both the private rented sector and the affordable housing sector. These guarantees were first set out in the Infrastructure and Financial Assistance Bill published last autumn. The plan is to have arrangements in place by the end of April 2013, in respect to both sectors.

In relation to the [private rented sector](#), projects are to have a minimum size of £10m but this can comprise more than one development site. The maximum loan to equity ratio is 80/20, evidenced by professional valuation. All applications are subject to full due diligence tests and applications for the private rented guarantee must receive approval in principle from Government by 31 March 2015.

For [affordable homes](#), the minimum size of the project is not less than £5m but the "project" can comprise more than one site. There are also similar five yearly revaluation obligations. Debt will be available for up to 30 years and there is no maximum debt size. Affordable homes on section 106 schemes are eligible.

These housing guarantees apply only to "additional new build" homes.