

# *BIM: Risks & Responsibilities:*

*Can a BIM Protocol provide the solutions?*

*CIC/BIM Pro (2013)*

# Overview

- Background:  
*Personal / BIM*
- BIM Protocol:  
*Purpose / Scope*  
*USA Precedents Protocols: ALA: Document E202 / ConsensusDOCS 301*
- UK Standard Protocol: CIC BIM Pro (2013)  
*Structure / Hierarchy*  
*Roles / Rights / Responsibilities*
- Relationship between Protocol & Contract  
*Conflicts / Priority*  
*Provisions / Amendments*
- Legal Context:  
*Standard Contracts / Collaboration / Good faith*
- Conclusion

# *Background: Personal*

- Architect
- MSc Construction Law & Dispute Resolution
- Chartered Institute of Arbitrators
- Sectors:
  - Residential*
  - Industrial / Commercial*
  - Education*
  - Heritage*
- Regions:
  - Midlands - Nottingham*
  - Scotland – Edinburgh*
  - London*
  - Hampshire – Winchester: ArchitecturePLB*

# Background: BIM

- BIM Level 2:

*Federated models*

*Maintain individual party responsibilities*

- Multiparty / Single Process

*Differing appointment documents – how align?*

*Parity of parties?*

*How / where define roles / responsibilities?*

*Collaboration: contractual requirement / silo cultures*

- BIM: Modelling & Managing Information

*Purpose of BIM – what does the client want?*

*Construction Strategy – where are the intended savings anticipated to arise?*

# *BIM Protocol*

- BIM Level 2

*Established bipartite contracts*

*Define boundaries / responsibilities / processes / outcomes*

*Difficulty of multiparty environment – align series of processes / outcomes as if single procedure*

- Bolt-on solution to existing contracts

*‘Light touch’*

*Relationship between protocol / primary agreement*

# *BIM Protocol - key areas to address*

- Define team member responsibilities
- Define federal cohort of models
  - What information*
  - Level of Detail at progressive stages*
- Reliance
  - Who permitted*
  - For what purpose*
- BIM Co-ordinator
- Common data environment
- Interoperability
- Allocate responsibilities for discrepancies between models
- Completion: what information handed over
  - Format*
  - Ownership*

# *BIM Protocol - drafting*

- Bespoke:  
*Time / Risk / Oversight / Effectiveness*
- Standardisation  
*No contract specific document*  
*Relationship between protocol / primary agreement*  
*Consensus allocation of responsibility / ownership / risk*
- “*Designers want to design structures, not structure contracts*”
- CIC BIM Pro (2013)

# US BIM Protocol Precedents

- AIA Document E202: BIM Protocol Exhibit (2008)  
*ALA Digital Data Protocol Exhibit – append to differing contracts*  
*Focus: substance of models - Model Element Table*  
*Consistency / commonality of element definitions: Unifformat Codes*  
*LOD: 5 Levels + ‘standard uses’*
- ConsensusDOCS 301: BIM Addendum (2008)  
*Focus: management of process*  
*Specifically take precedence over other conflicting contract terms*  
*Information Manager*  
*Project specific BIM Execution Plans*  
*Addendum waivers consequential losses arising from use of model*
- Little tested in court



# *CIC BIM Pro (2013)*

- BIM Level 2
- Append to existing standard contract forms
- Light: 8 standard clauses  
*Guidance (aims / objectives / definitions)*
- 2 'active' appendices
- Model Production & Delivery Table (MPDT)  
*Follow ALA: tabulated approach to model definition*  
*Elements to be designed / when / who / LoD*  
*Common definitions: PAS 1192-2*
- Information Requirements  
*Expectation of extensive Employer input*
- Information Manager  
*Process management*  
*CIC/INF MAN/S (2013)*

# Structure & Hierarchy

- Cl. 2.1: Conflict of terms

*Protocol claims priority over other contract documents (including main agreement)*

*Contestable?*

- Cl. 2.2: Conflict of information

*Status of model v outputs / drawings*

*Statutory Submissions*

*Status of contract documents*

# *Employer's Role: rights & responsibilities*

- **Cl. 3.1.1: Adoption of Protocol**  
*Ensure incorporation into all Project Agreements*  
*Procurement - novation?*
- **Cl. 3.1.2: Protocol management & implementation**  
*Ensure Information Requirements & Model Production & Delivery Table up to date*  
*Appointment of Information Manager*  
*Critical engagement with technical processes / outputs*  
*(unless within scope of a Project Team Member's obligations)*
- **Cl. 5: Residual risk of interoperability & data integrity**  
*Absolve Project Team Members – accord with Protocol, no warranty*  
*How well placed is the Employer to judge / manage this risk?*

# *Project Team Members' Roles: rights & responsibilities*

- Designers / Contractors

*No distinction*

*Production of specified model – Model Production & Delivery Table*

- Cl. 4.1.1: Level of skill and care

*Standard as per main Agreement – consistent?*

*Cl. 4.1.2. subject to events outside its reasonable control*

*Accuracy of clash detection – reasonable v capacity & accuracy?*

- Software design delegation

*Responsibility?*

*US: M A Mortenson Company Inc v Timberline Software Corporation*

*Software error: contractor bid \$1,950,000 too low*

*Software purchase contract – limited liability to purchase price*

*Black-hole risk?*

# *Project Team Members' Roles: rights & responsibilities*

- Cl. 6 Intellectual Property – ownership & protection

*Licence to transmit / copy / use*

*'Permitted Purpose' - fluid to suit process / lacks definition*

*Handover – lifecycle of building?*

- Cl. 6.4: Revocable licences

*Suspend for non-payment*

*Federal environment – web of sub-licences from Employer to Project Team*

*Necessary provision? Housing Grants, Construction & Regeneration Act (1996)*

# *Information Manager's Roles: rights & responsibilities*

- **CIC/INF MAN/S (2013)**  
*Not BIM Coordinator nor design coordination*  
*Role: undertaken by existing Project Team Member*
- **Common Data Environment Management**  
*'Establish' & Manage*  
*Providing host service – express additional service*
- **Project Information Management**  
*Initiate / agree / implement Project Information Plan & Asset Information Plan*
- **Coordination with wider project management**  
*Archiving federal models*

# *Relationship between Protocol and Contract*

- CIC BIM Pro (2013)

*Anticipated to 'bolt-on' to existing contracts with minimal amendment*

*Cl. 2.1 Protocol claims priority in event of conflict*

*Unforeseen effects of primary agreement?*

*What if another contract document has a similar provision?*

- Conflict provisions

*Terms of main agreement*

*Mechanism of incorporating protocol*

*Effective hierarchy across all contract documents*

# *Relationship between Protocol and Contract*

- Priority amendment or subservient support document?  
*Bespoke wording prevail over standard printed conditions*  
*Difficulties of contract interpretation*
- Fenice Investments Inc v Jerram Falkus Construction Ltd  
*JCT D&B – standard provisions for interim payments*  
*Employer's Requirements – differing payment provisions*  
*Conflict terms – 'unworkable'*  
*JCT cl. 1.3: precedence clause: predetermined ERs / CPs / Contract Sum Analysis as subservient – cannot override or modify Agreement*
- Contract interpretation  
*Objective intentions of parties*  
*Clearly document BIM objectives in Protocol*



# *Primary Contracts – provisions*

- **Government Construction Strategy**  
*Procurement / Lean Client Task Group - recommendations*  
*NEC3 Option C*  
*PPC2000*  
*JCT Constructing Excellence*  
*Emphasis on un-amended*
- **BIM: Collaborative requirement?**  
*CIC BIM Pro (2013) - No collaborative provision*

# Good Faith

- Clarity of meaning & legal standing

*Ambiguous term – fall foul of contractual certainty*

*Relatively novel / evolving concept to English law.*

*Interfoto v Stiletto: ‘play fair, coming clean, putting one’s cards face upwards on the table’*

- Express term

*NEC3, JCT, PPC2000*

*Courts will endeavour to support – but limited precedence*

*Medirest v Mid Essex*

*Interpretation of obligations – under overarching duty of good faith*

- Implied terms

*Yam v International Trade*

*Long term relationship – court found required cooperation and mutual trust*

*Implicit term to give business efficacy*

# Conclusion

- BIM: Clarity of intent is critical
  - Protocol provides place to define / structure objectives*
  - Requires critical and technical engagement from Employer*
- Accommodating BIM Level 2
  - 'Bolt-on' protocol – easy fix to existing standard contract forms*
  - However, need careful thought about main agreement / provisions*
- CIC BIM Pro (2013)
  - Balance of risks?*
- Oiling the mechanics
  - Multiparty responsibilities / bipartite contracts*
  - Collaborative ethos necessitates / implies good faith*