Software Considerations for Engaging with Building Information Modelling (BIM)

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This practice advice note aims to offer some advice on the types of software available for BIM to assist landscape architecture practices in choosing the correct software for their needs. It is the responsibility of individual practices to assess their individual requirements and to investigate thoroughly whether they can use or supplement existing software packages to achieve their goal or whether they require new software.
1. **Background**

The Government Construction Strategy was published by the Cabinet office on 31 May 2011. The report announced the Government’s intention to require collaborative 3D BIM (with all project and asset information, documentation and data being electronic) on its projects by 2016.

The Landscape Institute maintains its message that BIM is not about software: it is a process which goes beyond any one piece of software. Software can be used to assist in implementing that process, and the type of software you may require will depend on a number of factors:

- The type of work your practice undertakes
- The type of clients you work for, private or public sector
- The scale and complexity of projects which you are involved with
- Your approach to BIM and how far you want to take it.
- How much you are prepared to invest

2. **Choosing new software**

In the case of choosing new software the following should be considered:

- Ability to do what you need it to do
- Interoperability of software with your clients and other consultants
- Hardware requirements
- Staff training requirements
- Changes to company standards / processes
- Software support

Most software companies now offer free trials and it may be worth considering establishing an individual or small team to trial a shortlist of products on a small pilot project before committing to purchase.

It is unlikely that one individual piece of software will fulfil all of your requirements and so the interoperability of software packages is vitally important. The current preferred method of exchange is Industry Foundation Classes (IFC), an open and neutral file format, developed by buildingSMART as a common data schema to enable exchange of information between different types of software. As the Government’s contracted deliverable will be a spreadsheet in COBie format you should also enquire about the capability of any software to output data in this format.
3. **Types of software**

The following describes the types of software available as a starting point for researching the most suitable solution. A list of software is available on the LI's Open BIM Project website ([www.landscapeinstitute.org/bim](http://www.landscapeinstitute.org/bim)). The list is by no means exhaustive and other solutions may be available.

The Landscape Institute does not endorse any particular software package.

- **3D BIM authoring software**: software which enables the user to create Building Information Models. Each package has different capabilities and specialisms, there is no one-stop-shop for Landscape Architecture.

- **Specialist landscape architecture software**: enables the user to carry out specific landscape architecture related tasks for example production of paving layouts and planting plans

- **Specification software**: enables the user to write specifications

- **3D modelling software**: enables the user to model complex 3D forms

- **Plant modelling software**: enables the user to model planting

- **Rendering software**: enables the user to achieve higher quality visualisations

- **BIM review software**: enables the combination of Building Information Models from different disciplines, checking for clashes, interrogation of the model and communication the design to others.

- **BIM cost management software**: enables interrogation of Building Information Models and integrate cost data

- **BIM viewer software**: allows the user to view BIM models

- **COBie software**: enables the user to produce COBie spreadsheets

- **Facilities management software**: enables integration of Building Information Model with Facilities Management Planning and Building Management Systems

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