

## **Building Information Modelling (BIM) Acceleration, in brief.** **November 2014**

### **BIM Acceleration Strategy**

The BIM Acceleration Committee's strategy is a cascade approach targeted at key clients by promoting the adoption of BIM use and by raising awareness of the benefits that BIM can offer.

The construction sector productivity growth figures in New Zealand are well behind those of other sectors. The Productivity Partnership has identified that an increase in the adoption of BIM is key to increasing productivity.

The benefits of using BIM in construction are huge, ranging from cost savings in construction and long-term maintenance, through to construction workflow efficiencies such as early collaboration.

While BIM adoption is slowly on the rise in New Zealand with industry currently driving the majority of BIM uptake to date, the BIM Acceleration Committee gives a collective cross industry - Government expert perspective to ensure all measures in place are consistent and for the good of the industry.

The Committee is working to the strategy of targeting large clients, in particular central Government, who have the ability to fully maximise the benefits of BIM through their large scale projects and financial involvement from construction to operation. By doing so the benefits and use of BIM will cascade and deliver significant benefits over the life of the asset.

The BIM acceleration strategy focusses on areas identified by the Committee as being key to increasing the adoption of BIM in New Zealand. The Committee has work underway to target large clients, to provide contractual documentation, to give real examples through case studies and to implement BIM training in NZ. The Committee revisits its strategy at each six-weekly meeting to assess current work and to identify areas where efforts should be focussed as BIM acceleration advances.

### **Success to date**

The **New Zealand BIM Handbook** was developed by the Committee with extensive industry input and published in July 2014. The BIM Handbook guides decisions around if and how to use BIM and in realising the benefits that can be gained. Appendices include:

- Modelling and documentation practice
- NZCIC phases with BIM Uses and tasks
- Levels of Development definitions
- BIM Uses definitions
- Project BIM Brief
- BIM Execution Plan

Four **"BIM in Action" case studies** were published in October 2014 with additional case studies being developed. The full suite of case studies will provide examples for all the BIM uses as outlined in the BIM handbook.

A brochure outlining the **Productivity Benefits of BIM** is also available on the BIM IN NZ pages on the Productivity Partnership website.

## Makeup of Committee

Committee members are drawn from across the construction industry and Government. Members include:

Andrew Reding – Productivity Partnership (Chair)

Andrew Howie (Government Procurement, MBIE)

Ann Ryan – RCP

Chris Kane – Productivity Partnership (MIBE)

Dave Hunter – Fletcher Construction

David Sharp – BRANZ

Haydn Read – Wellington City Council

Heather Staley – Productivity Partnership (MBIE)

Jon Williams – Beca

Robert Amor – University of Auckland

Steve Appleby – AECOM

Steve Davis – Assemble

## Projects

To achieve the BIM acceleration strategy several major components have been named as individual BIM projects. Each project has a dedicated project team to efficiently progress work in the area and who report back to, and consult with, the wider Committee. Project teams are made up of select committee members and external expertise is sought out where necessary. These projects have an initial timeframe of around 6 months and are regularly reviewed and revised, along with the overall programme, to see where adjustments are required to keep alignment with the strategy and the wider progress of BIM adoption in NZ.

The Committee's primary project aims to have **Government as a BIM client** by creating and supporting the demand for BIM use in central Government construction clients. Government is seen as a key target to create the demand for, and showcase benefits of, BIM as a buyer and as an owner and operator of buildings. This project will identify and support Government construction clients to use and realise the benefits of BIM. The project team will raise awareness of BIM for such clients and provide guidance and support documentation such as a procurement route map and BIM contracting schedules.

The **terms and conditions** project will provide BIM users with standard BIM contracting schedules that supplement the existing legal framework in New Zealand. The project will facilitate the creation of functional legal tools for consultants and contractors to assist them successfully adopt BIM. The project will also reduce apprehension and misunderstanding in industry around legal implications of BIM.

A suite of **BIM case studies** is underway to generate short, engaging, case studies to promote the uses of BIM to target audiences. Case studies will increase awareness of BIM, its uses and the costs and benefits of using it in a variety of settings that relate to a variety of potential clients.

**Industry training** is another key element to the BIM Acceleration strategy.

The project will raise understanding of the benefits and application of BIM among building professionals and will identify the components required for the development of training programmes for professionals, including CPD requirements, and for tertiary institutes. The project team has investigated options for a BIM training course for industry practitioners in NZ and will analyse training needs for BIM inclusion in tertiary programmes.

The **metadata standards** project will oversee the development of standards to ensure interoperability of all BIM data. It is important to ensure the standards are appropriate for all parties in New Zealand. To do so a subcommittee with additional BIM expertise has been created to ensure there is industry wide agreement on the standards to be used.

**Communications and general awareness raising** is a project to facilitate raising awareness of the opportunities and benefits of using BIM, for the target organisations as well as industry in general.

**Group home builders** were originally identified as another target client. The project aimed to raise the BIM awareness and understanding of the opportunities of BIM to the Group Home Builders. As yet little interest has been shown by such parties but the project team continues to monitor for any signs of interest.

### **Industry Survey**

Two surveys have been commissioned. The first uses a few key questions from the Masterspec BIM survey, but to a broader audience (37,000) to get a better view on the depth of BIM uptake existent in NZ at the moment.

The second, being issued during November 2014, targets a group of 60 respondents from all sectors within the industry (building, owning, operating, sponsoring) and will form a reference group for annual surveying. A significant proportion of NZ construction activity is covered by this reference Group and the annual survey will offer the opportunity to both measure how effective efforts to increase the use of BIM are and to get feedback on constraints to its use.