

Project 3.28

National BIM Guidelines and Case Studies for Infrastructure

RESEARCH PROGRAM 3: PRODUCTIVITY THROUGH INNOVATION

There is growing enthusiasm for fully integrated Building Information Models to contribute to increased productivity across the construction supply chain. The need for Building Infrastructure Modelling (BIM) guidelines and case studies to be developed in the infrastructure - especially transport infrastructure - sector has become apparent. These should be established in a mode complimentary to resource and mining developments in this area to capitalise on existing investments and provide consistency across common contexts.

Objective

A review of existing BIM guidelines and initiatives has been compiled and studied. It includes more than 40 sets of guidelines across 10 countries. The development of the guidelines and the implementation plan for Australian infrastructure will be based initially on existing BIM guidelines from the building industry, but validated through a series of rigorous research methodologies. These research instruments include questionnaires, interviews, focus groups, multiple case studies, Charrette workshops and benchmarking.

The research team will work closely with industry partners from Western Australia, Queensland, New South Wales and Victoria with participants representing a key cross section of the Australian infrastructure industry.

Industry Outcome

This project will leverage off earlier successes in commercial building and provide a practical set of BIM guidelines and case studies to support ongoing industry productivity improvements. These will benefit the Australian infrastructure construction industry by helping to more fully integrate Building Information Models to increase productivity across the project delivery supply chain.

This project also aims to establish a taskforce with key stakeholders to facilitate a two-year program for the delivery of the BIM Implementation Plan for Infrastructure.



Professor Xiangyu Wang
Project Leader, Curtin University
E: xiangyu.wang@curtin.edu.au

