BIM ACTIVITY IN AUSTRALIA

Richard Choy, CEO
NATSPEC // Construction Information

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Presentation Overview

- NATSPEC
- BIM Guidelines and Standards
- BIM Research
- NATSPEC National BIM Guide
- BIM Objects and Specifications
- BIM Community
- BIM & Government
Not-for-Profit formed in 1975
- Air Con and Mechanical Contractors' Assoc of Aust
- Australian Council of Building Design Professions
- Australian Elevator Association
- Australian Institute of Architects
- Australian Institute of Building
- Australian Institute of Building Surveyors
- Australian Institute of Quantity Surveyors
- Construction Industry Engineering Service
- Consult Australia
- Engineers Australia
- Master Builders Australia
- Standards Australia
Improve the quality of construction in Australia

- Building Commission Victoria
- Dept of Infrastructure (NT)
- Dept of Finance (WA)
- Dept of Finance and Deregulation (Federal)
- Dept of Finance and Services (NSW)
- Dept of Housing and Public Works (QLD)
- Dept for Transport, Energy and Infrastructure (SA)
- Dept of Treasury (ACT)
- Dept of Treasury and Finance (TAS)

Provides the baseline level of quality for Government and quality projects
Using good design documentation you protect your reputation, you reduce defects, you produce high quality, you protect costs and more importantly and overarchingly, you deliver on time. And without good documentation you can’t achieve all those objectives”.

Mario Macri, Lend Lease, Centraplaza project
NATSPEC believes that digital information, including 3-D Modelling and Building Information Modelling, will provide improved methods of design, construction and communication for the industry.

Further, NATSPEC supports open global systems. This will result in improved efficiency and quality.
BIM Guidelines

2009 NATSPEC participated in the development of the National Guidelines for Digital Modelling and Case Study documents.

The Guidelines were developed to initiate discussion and involvement across the Australian construction industry on the collaborative use of BIM in order to encourage the development and adoption of common national standards of practice.
National Guidelines for Digital Modelling

BIM Research

2010 NATSPEC sat on the Digital Technologies Working Group and assisted in the development of the economic study commissioned by the Australian Government’s Built Environment Industry Innovation Council (BEIIC).

The purpose of this study was to examine the potential for BIM to improve the productivity within the Australian construction industry.

Welcome to NATSPEC

NATSPEC is the trading name of Construction Information Systems Limited, ABN 20 117 574 609.

NATSPEC, founded in 1975, is a not-for-profit organisation that is owned by the design, build, construct and property industry through professional associations and government property groups. It is impartial and is not involved in advocacy or policy development.

NATSPEC’s major service is the comprehensive national specification system endorsed by government and professional bodies. NATSPEC, the National Building Specification, is for all building structures with specialist packages for architects, interior designers, landscape architects, structural engineers, service engineers and domestic owners. AUS-SPEC is the Local Government specification system for the life-cycle management of assets. Packages include Urban and Open Space, Roadworks and Bridges, Public Utilities, and Maintenance. NATSPEC is also responsible for the National BIM Guide and its associated documents.

NATSPEC’s objective is to improve the construction quality and productivity of the built environment through leadership of information.

Go to SPECbuilder Live

Download SPECbuilder Live Guide

View the 9 minute NATSPEC for Quality Projects video

NATSPEC BiM

Construction Information
Welcome to NATSPEC's BIM Portal

This website is home to the [NATSPEC National BIM Guide](#) and other documents. It is also a repository of documents and tools in the construction industry.
Project BIM tools

This core document defines:

- Uses for BIM on projects
- Roles and responsibilities
- Collaboration procedures
- Modelling requirements
- Documentation standards
- Digital deliverables

Key requirement:

- BIM Management Plan
NATSPEC Project BIM Brief

Provides a place to document the specific requirements of a project by reference to the National BIM Guide.
23 BIM Uses

7.1 Project Definition, Planning and Pre-Design
7.2 Architectural Modelling (Design)
7.3 Structural Modelling and Analysis
7.4 MEP Modelling and Analysis
7.5 Quantity Take-off and Cost Planning
7.6 Construction Models
7.7 Facilities Management/As-built Models
“Excellent work and good to see real progress with this tool. The UK is lagging behind because of red tape and current structures which are proving to be a difficult barrier to overcome but we are making head way (thinkBIM project with our (not for profit) organisation Construction Sector Network).”
Karl Redmond – Construction Sector Network UK – 4/10/2011

“I attended a forum yesterday sponsored by the Associated General Contractors of America and your BIM Guide was referenced as being currently the best that one of the contractors reviewed. Congratulations!”
Renee Tietjen – Senior Architect, Department of Veteran Affairs – 4/11/2011
NZ BIM Guide

2013 NATSPEC has been engaged to produce the New Zealand BIM Guide based on the NATSPEC National BIM Guide.
NATSPEC is a member of the AIA/CA BIM and IPD Steering Group. The purpose of this group is to develop resources and guidelines for practitioners in the Australian building industry.

- 2012 documents produced on explaining BIM to different sectors; BIM Education; and, BIM Management Plans.
- 2013 finalizing documents for other industry sectors and BIM Legal and Procurement issues.

BIM Objects for MEP

NATSPEC is a member of the Steering Committee for the AMCA BIM MEP\textsuperscript{AUS} project. The purpose of the project is to facilitate the effective adoption of BIM practices associated with building services (Mechanical, Electrical, Plumbing).

2012 AMCA has published a number of standards for modelling MEP services which can be downloaded from \url{www.bimmepaus.com.au/}

More standards are currently being developed.
Collaborative Object Libraries

2012 NATSPEC is a partner in this project with SBE NRC. The objective of the project is to develop standards and processes that will enable collaborative object libraries to store and share information appropriate to each stage of the built asset lifecycle, and in a platform neutral manner. Proof of concept has been established.

2013 Objects are being developed for some government clients and funds are being sought for the next phase of work.
2006 **SpecNotes and Viewer**  NATSPEC partnered with CRC-CI to research how software applications may integrate specification documents with digital building models.

2013 **BIM, Specifications and Bills of Quantities**  NATSPEC is partnering with QUT on an ARC linkage project which is examining the relationship between BIM, construction specifications and cost plans and how they might be integrated.
ISO TC59/SC13 Mirror Committee BD-104
NATSPEC’s proposal to form an Australian mirror committee of International Organization for Standardization Technical Committee 59/Subcommittee 13 (ISO TC59/SC13) Organisation of information about building works was approved by Standards Australia (SA) in 2012.

ISO TC59/SC13 works to develop standards for the digital exchange of data and documentation.
• **Collaborate ANZ**  The aim of Collaborate is to foster and disseminate best practice amongst peers and to the wider industry. [collaborate-anz.com](http://collaborate-anz.com)

• **OBAA**  The OBAA is a unified group of software vendors who share the common purpose of promoting open BIM standards which facilitate the exchange of digital information between BIM users. [buildingsmart.org.au/open-bim-alliance-of-australia](http://buildingsmart.org.au/open-bim-alliance-of-australia)

• **ANZRS**  ANZRS addresses content standards for Autodesk Revit only.
BIM & Government

No national approach
Challenges

- IPD - Integrated Project Delivery
- Contracts
- IP - Intellectual Property
- Liabilities
- Expectations
- Facility Management
Thank you