

10 July 2015

Dr Bill Pender
Inquiry Secretary
Standing Committee on Infrastructure and Communications
House of Representatives
PO Box 6021
Parliament House
CANBERRA ACT 2600

Dear Dr Pender

Inquiry into Smart ICT

I am writing in regard to the *Inquiry into Smart ICT* (Inquiry) in the design and planning of infrastructure being undertaken by the House of Representatives Standing Committee on Infrastructure and Communications. A number of the criteria outlined in the Inquiry's *Terms of Reference* are being addressed by the Australasian Procurement and Construction Council (APCC) through its current body of work.

The APCC is the peak council whose members are responsible for construction, procurement, property and asset management policy for the State and Territory governments. The APCC has, for the past 48 years, been proactive in providing a single, national interface between government and the building and construction industry.

The following summary provides a snapshot of our recent initiatives directly targeting an increase in productivity, competitiveness, innovation, reduction of red tape, and sustainability within the building and construction industry, in particular the design and planning of infrastructure.

Need for a national focus

APCC and the Australian Construction Industry Forum (ACIF) have formed a Strategic Forum for the Australasian Building and Construction Industry (Strategic Forum). The Strategic Forum is a unique body that brings together key stakeholders in the Australasian building and construction industry.

The partnership identifies the priority needs of industry and government in improving productivity and, where appropriate, increased innovation, including innovative technology, and the skills and capabilities that are required.

The current major focus of the Strategic Forum is to develop industry wide use of Project Team Integration (PTI) and Building Information Modelling (BIM) across all project phases by stakeholders in the Australian building and construction (including infrastructure) industry - Refer to Appendix A: Key Stakeholders.

To achieve this, the Strategic Forum has taken a national lead on accelerating the adoption of PTI and BIM in Australasia in collaboration with many key stakeholders in the building, infrastructure and public sectors. The impetus for our efforts is, in part, to reduce construction costs, and promote modern building practices to achieve optimum delivery of and benefits from the adoption of BIM.

The public and private sector members of the Strategic Forum have worked collaboratively and proactively to deliver six key objectives to accelerate the adoption of PTI and BIM in Australasia. These key objectives are:

1. The national *Framework for the Adoption of Project Team Integration and Building Information Modelling* (the Framework) as an 'industry first' and was designed to guide and assist industry stakeholders in the adoption and implementation of PTI and BIM.

It identifies capabilities and international best practice in the use of PTI and BIM, signalling a 'whole of industry' approach to what will be 'business as usual' in the very near future for the building and construction industry. The Framework supports working towards harmonisation in the creation of nationally consistent arrangements. It also highlights the need for the Australian and New Zealand building and construction industry to be competitive, particularly in the Asia-Pacific region.

The Framework is equally applicable to buildings as it is to civil infrastructure development, such as transport – roads, railways etc., and larger elements of the built environment such as precinct or city urban modelling. The Framework incorporates consideration of:

- *Adoption of New Technologies in reducing construction costs, and promotion of modern building practices.*
- *Considering the use of smart ICT in related fields, such as disaster planning and remediation.*
- *Administrative action, by which government can promote this technology to increase economic productivity.*

2. The *National BIM Portal* website is home to materials deemed current and relevant to the Australian and New Zealand PTI and BIM environment. It is also a repository of documents and tools that will assist the implementation of BIM in the construction industry.

Members of the Strategic Forum are responsible for providing relevant material to ensure the Portal remains current, and to promote the Portal to respective stakeholders as the one-stop-shop for relevant and current PTI and BIM material. It also is the national hub for adoption of ISO and related BIM standards across the Commonwealth, and all States and Territories.

3. The *Building and Construction Guide: Project Team Integration (PTI) and Building Information Modelling (BIM)* released 26th June 2015, articulates how to integrate BIM into each procurement model and the different roles and responsibilities for each party. It is our latest resource in a series of nationally important BIM initiatives designed to provide a procurer with the reference tools and templates necessary when planning to use BIM for a construction project.

4. The Strategic Forum is currently finalising the development of education and skill sets for people working with BIM from clients, designers, constructors and facility managers. This work is being undertaken by a collaborative working group that includes designers, construction managers and government clients. An outcome of this initiative is the "BIM Skills Sets" which will shortly be released for Industry Consultation.

BIM Skill Sets that are under development will be integrated into formal learning programs at both the vocational and tertiary levels, as well as on the job learning. These BIM Skill Sets are expected to be released by December 2015.

5. Domestic and international BIM case studies are currently being developed. The Strategic Forum is developing statements of benefits and costs in conjunction with buildingSMART Australasia. These case studies are being developed to include the different infrastructure and building types.

These Case Studies will enable better strategies to be marshalled and presented to motivate clients of the benefits of PTI and BIM.

6. NATSPEC is developing a National Object Library. It is important that Australian and New Zealand manufactured products that comply with Australian and or New Zealand BIM Standards are accessible in a BIM Library. It is desirable that Australia and New Zealand share compatible systems, and international consistency of BIM objects for international services and trading competitiveness. The development of Australia and New Zealand-specific objects will maximise growth in the Australian and New Zealand BIM services markets. Development of a shared international BIM Library to suit Australian and New Zealand construction practice is currently being undertaken.

NATSPEC have been developing National standards which includes the previously mentioned National Object Library within the Australian and New Zealand context. These standards provide a consistent approach for road, bridge and building projects across Australian governments and industry. They set out processes for developing strategies and establishing a series of BIM standards, policies and principles. <http://bim.natspec.org/>

Other relevant publications

The following Strategic Forum guides provide best practice advice and focus on improving the procurement and delivery of built assets:

- *The Case for Project Team Integration and the Project Team Integration Workbook* (ACIF & APCC);
- *Guide to Successful Project & Asset Delivery – Getting it right Up Front*; and
- *A Guide to Project Initiation publication – for Project Sponsors, Clients and Owners*.

The APCC will continue to explore and adopt new and innovative approaches to maximise the delivery of capital works programmes as an enabler of economic growth and at the same time reduce red tape in the construction procurement function. All of the above referenced materials are available from our website: www.apcc.gov.au.

I thank you for providing the APCC with the opportunity to provide a Letter in response to the Inquiry. Please do not hesitate to contact Ms Teresa Scott, Executive Director, APCC on 02 6285 2255 or email: tscott@apcc.gov.au if we can provide additional information.

Yours sincerely

Mr David McHugh, APCC Chair
Chief Executive
Department of Infrastructure, Northern Territory

Enc: Vision Statement for the *Strategic Forum for the Australasian Building and Construction Industry*.
Framework for the Adoption of Project Team Integration and Building Information Modelling (the Framework).

The Building and Construction Guide: Project Team Integration and Building Information Modelling.

Appendix A: Key Stakeholders working with the Strategic Forum for the Australasian Building and Construction Industry

Government clients, designers and constructors are collaborating with the Strategic Forum to address the core issues in respect to adoption of PTI and BIM in Australia and New Zealand. This stakeholder group consist of the following representatives:

- NATSPEC;
- buildingSmart Australasia;
- Austroads;
- Australian Institute of Building (AIB);
- Australian Institute of Architects (AIA);
- Australian Standards;
- Consult Australia;
- Roads and Maritime Services, NSW;
- Master Builders Association (MBA);
- Australian Mechanical Contractors Association (AMCA);
- The Facilities Management Association of Australia;
- Federal, State and Territory government representatives (APCC members);
- Constructors e.g. Lend Lease;
- BIM Academy (UK and Australia);
- Construction Training Board (CITB); and
- Construction Skills Queensland (CSQ).