



# National Digital Engineering Policy Principles

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Governments in Australia recognise the importance of Digital Engineering (incorporating Building Information Modelling [BIM]) in the delivery and management of buildings and infrastructure assets and networks. Digital Engineering offers many benefits throughout the asset lifecycle and has the potential to drive efficiency, value for money, productivity and innovation. However, the application of Digital Engineering for infrastructure sectors presents a diverse set of challenges as assets can vary in nature from being discrete in stand-alone buildings, to linear when forming part of a broader network.

Digital Engineering may be defined as the convergence of emerging technologies such as Building Information Modelling (BIM), Geographic Information Systems (GIS) and related systems to derive better business, project and asset management outcomes. Digital Engineering enables a collaborative way of working using digital processes to enable more productive methods of planning, designing, constructing, operating and maintaining assets through their life-cycle.

To facilitate best practice nationally in the adoption and integration of Digital Engineering, Governments will take a leading role and apply a consistent approach in building and infrastructure development and in its interaction with industry. While national consistency in the approach to Digital Engineering and the data requirements for major projects is a prime objective, state and territory jurisdictions will continue to operate within their own policy parameters.

## Goals

- To provide a framework that promotes a greater uptake of Digital Engineering by the building and infrastructure sectors nationally and to encourage innovation and efficiencies in their delivery and management of public infrastructure.
- To promote consistency and openness in the data requirements for major public building and infrastructure assets to facilitate a more harmonised approach to industry in the application of Digital Engineering.
- To increase capacity and capability across both the public and private sectors to optimise the benefits of Digital Engineering in building and infrastructure development, delivery and management.

## Principles

- A more consistent application of Digital Engineering in public infrastructure will be actively encouraged and supported by Government at a level appropriate to the size and complexity of the asset.
- Digital Engineering data formats, standards, protocols, systems and tools should be open and harmonised across governments, where possible, to facilitate greater consistency in engagement with industry.
- Digital Engineering data formats, standards, protocols, systems and tools should be harmonised across whole of asset life-cycle management processes, where possible, to ensure data built up through the design and construction phases of a project is fully utilised in the asset management and operations phases.
- Governments will work to ensure Digital Engineering approaches complement existing project design and development systems and interface with Geographic Information Systems (GIS) to graphically display and visualise relevant information captured as part of the Digital Engineering process.
- Governments will work collaboratively across state and territory jurisdictions and with the private sector to drive best practice in the application of Digital Engineering in public infrastructure development and management.
- Governments will seek to actively incorporate lessons learned from all sectors and international experiences in the application of Digital Engineering in public infrastructure development and management.
- Governments will work to build capability within the public sector to support Digital Engineering and, where practicable, enable an increase in private sector capability and capacity to optimise the application of Digital Engineering.