

TSC Category	Technology Road Mapping					
TSC	Building Information Modelling Application					
TSC Description	Use Building Information Modelling (BIM) software to make design, engineering, project and operational information accurate, accessible and actionable for engineering projects					
TSC Proficiency Description	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
			EGS-TEM-3027-1.1	EGS-TEM-4027-1.1	EGS-TEM-5027-1.1	
			Apply Building Information Modelling (BIM) across engineering project lifecycle	Operate individual Building Information Modelling (BIM) modules during engineering projects	Drive enhanced project outcomes through integrating project phases to enhance operational excellence and effectiveness	
Knowledge			<ul style="list-style-type: none"> Principles of BIM Value proposition of BIM Requirements of BIM Definition of BIM Application of BIM Technology used in BIM BIM design process Documentation required for BIM Databases and information systems required for BIM 	<ul style="list-style-type: none"> Components of BIM Execution Plan Primary uses of BIM Secondary uses of BIM BIM standards and implementation strategies BIM modelling for Architecture, Structure and Mechanical, Electrical and Plumbing (MEP) 	<ul style="list-style-type: none"> Building Information Modelling (BIM) Management for Projects BIM Management for Organisation BIM e-submission system and regulations BIM Legal and Contractual Documents 	
Abilities			<ul style="list-style-type: none"> Identify BIM application and development in industry Identify BIM's interoperability with other analysis tools Maintain databases and information systems for BIM Develop models containing building elements and information Integrate the design of active systems in reference models Operate BIM applications and software Interpret data within BIM outputs 	<ul style="list-style-type: none"> Identify high value BIM uses during the project planning, design, construction and operational phases Articulate value of implementing BIM in the building life-cycle Develop the BIM execution plan Propose how various BIM tools could be used in a BIM project Develop the technological infrastructure to support the implementation Diagnose interoperability issues during various BIM project phases 	<ul style="list-style-type: none"> Establish purpose of BIM implementation Establish BIM use characteristics Review BIM execution plan Manage integration of BIM with other technologies Review proposed designs and implementation strategies Manage BIM e-submission procedure Refine existing BIM plan, work-flow or system Leverage synergies to drive efficiencies in project execution 	

SKILLS FRAMEWORK FOR ENGINEERING SERVICES
TECHNICAL SKILLS & COMPETENCIES (TSC) REFERENCE

			<ul style="list-style-type: none">Analyse the design performance and compliance of the relevant systemsDocument the processes using templates from relevant resources	<ul style="list-style-type: none">Review BIM deliverables in adherence to legal and contractual requirementsReview accuracy of documentation of BIM processes	<ul style="list-style-type: none">Endorse BIM deliverables in adherence to legal and contractual requirements	
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