

**SKILLS FRAMEWORK FOR MEDIA
TECHNICAL SKILLS AND COMPETENCIES (TSC) REFERENCE DOCUMENT**

TSC Category	Media Technology and Operations					
TSC Title	Broadcast Infrastructure Design					
TSC Description	Design broadcast systems and infrastructure in light of commercial, technical and implementation considerations to meet current and future broadcast requirements					
TSC Proficiency Description	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
		MED-MPN-2011-1.1	MED-MPN-3011-1.1	MED-MPN-4011-1.1	MED-MPN-5011-1.1	
		Support the design and documentation of components of broadcast systems and infrastructure	Design broadcast systems and infrastructure to meet current and future broadcast requirements	Lead the technical design and project proposals of new broadcast systems and infrastructure to meet current and future broadcast requirements	Establish goals and objectives and drive the technical design of new broadcast systems and infrastructure	
Knowledge		<ul style="list-style-type: none"> • Technical layouts and technical design for broadcast infrastructure • Digital technical drawing tools • Functionalities of broadcast equipment • Connection of broadcast and IT systems • Operational and technical processes used with broadcast systems • Research techniques and methods • Relevant workplace safety and health guidelines 	<ul style="list-style-type: none"> • Digital technical drawing tools • Broadcast processes and systems • Broadcast technology, architecture and infrastructure • Principles of design, architecture, development and maintenance of networks • Security considerations for digital equipment and networked systems • Cost estimation techniques • Relevant workplace safety and health guidelines 	<ul style="list-style-type: none"> • Purpose, benefits, limitations and risks of the different equipment and software required for broadcast systems • Best practices in technical design of broadcast systems • Commercial estimation of broadcast equipment and infrastructure • Project management considerations for upgrade of broadcast systems and infrastructure • Quality of service requirements that may impact technical design of broadcast systems 	<ul style="list-style-type: none"> • Capabilities and limitations of in-house broadcast engineering infrastructure • Industry standards and upcoming technologies and equipment for broadcast systems • Quality of service requirements that may impact technical design of broadcast systems • Regulatory requirements pertaining to broadcast systems and infrastructure 	
Abilities		<ul style="list-style-type: none"> • Interpret systems architecture and blueprints to understand the requirements for technical design of broadcast systems and infrastructure 	<ul style="list-style-type: none"> • Analyse technical requirements to understand scope of technical design required for the proposed systems and infrastructure 	<ul style="list-style-type: none"> • Determine requirements for new broadcast systems and infrastructure based on broadcast requirements and current state evaluation 	<ul style="list-style-type: none"> • Review proposals for new broadcast systems and infrastructure • Establish goals and objectives of broadcast systems and 	

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		<ul style="list-style-type: none"> • Design component-level technical drawings based on the established architecture • Maintain updated documentation for design and specifications of broadcast systems and infrastructure • Collate estimated costing of components of broadcast systems and infrastructure, based on research • Follow workplace safety and health guidelines during the installation of broadcast infrastructure 	<ul style="list-style-type: none"> • Analyse blueprints and technical designs of existing broadcast systems and infrastructure to determine space, air-conditioning, electrical power and other technical constraints for new installations • Develop detailed technical specifications for broadcast systems based on established requirements • Propose the use of resources for technical equipment, technical areas or facilities, ergonomics and workflow that is efficient and will meet requirements • Determine the requirements for connectivity, ergonomics and alignment with existing systems and infrastructure • Develop broad architecture, overview and component layouts to guide the technical design of broadcast systems and infrastructure • Review technical designs prepared by the junior team members • Integrate designs created by team into overall technical design to present for review 	<ul style="list-style-type: none"> • Review technical and implementation feasibility of new broadcast systems and infrastructure • Review technical designs prepared by the team to provide inputs for refinement • Develop proposals for new broadcast systems and infrastructure • Present proposals for upgrade of broadcast systems and infrastructure to the leadership for review • Drive adherence to workplace safety and health guidelines across the broadcast infrastructure installation processes 	<p>infrastructure to be designed for installation</p> <ul style="list-style-type: none"> • Ideate technical, commercial and implementation feasibility of new broadcast systems and infrastructure • Establish success criteria for the design and implementation of broadcast systems and infrastructure • Review design of broadcast systems and infrastructure • Recommend modifications to design of broadcast systems based on commercial and implementation considerations • Secure necessary legal and regulatory clearances pertaining to broadcast installations • Establish workplace safety and health guidelines to be followed across the broadcast infrastructure installation processes 	
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			<ul style="list-style-type: none"> • Integrate cost estimates to provide overall costing estimates for the proposed upgrades • Implement workplace safety and health guidelines in the installation of broadcast infrastructure 			
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