

SKILLS FRAMEWORK FOR SEA TRANSPORT SKILLS MAP - CHIEF ENGINEER/2nd ENGINEER				
Sector	Sea Transport			
Track	Shipping			
Occupation	Marine Engineer Officer			
Job Role	Chief Engineer/2nd Engineer			
Job Role Description	The Chief Engineer/2nd Engineer oversees the marine engineering department on the ship and is responsible for the maintenance and operation of all engineering equipment on board ships powered by main propulsion machinery of 3,000 kW propulsion power or more. He/She ensures that the engine-room is suitable for inspection by port authorities and maintains an inventory of fuel and spare parts. He is highly organised and is able to work under pressure and time constraints during an emergency. The Chief Engineer/2nd Engineer must pass a colour vision test and must fulfil the requirements stipulated in the Standards of Training, Certification and Watchkeeping for Seafarers (STCW) issued by the International Maritime Organisation (IMO).			
Critical Work Functions, Key Tasks and Performance Expectations	Control the operation of the ship and care for persons on board	Control trim, stability and stress		Performance Expectations (For legislated / regulated occupations) In accordance with: <ul style="list-style-type: none"> Standards of Training, Certification and Watchkeeping for Seafarers (STCW)
		Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and protection of the marine environment		
		Maintain safety and security of the ship, crew and passengers and the operational condition of life-saving, fire-fighting and other safety systems		
		Develop emergency and damage control plans and handle emergency situations		
	Manage maintenance and repairs	Manage safe and effective maintenance and repair procedures		
		Detect and identify the cause of machinery malfunctions and correct faults		
		Ensure safe working practices		
	Manage electrical, electronic and control engineering operations	Manage operation of electrical and electronic equipment		
		Manage troubleshooting and restoration of electrical and electronic control equipment to operating condition		
	Manage marine engineering operations	Manage the operation of propulsion plant and machinery		
		Plan and schedule operations		
		Manage the operation, surveillance, performance assessment and maintaining of safety of propulsion plant and auxiliary machinery		
Manage fuel, lubrication and ballast operations				
Skills and Competencies	Technical Skills and Competencies		Generic Skills and Competencies (Top 5)	
	Cyber Security	Level 3	Communication	Advanced
	Electrical, Electronic and Control Engineering	Level 4	Decision Making	Intermediate
	Fire Prevention and Fire-fighting	Level 4	Global Mindset	Intermediate
	Maintenance and Repair	Level 4	Interpersonal Skills	Intermediate
	Personal Survival Techniques	Level 1	Leadership	Intermediate
	Propulsion, Plant and Machinery	Level 4		
	Ship Medical Care	Level 2		
	Ship Seaworthiness and Pollution Prevention	Level 4		
	Ship Security	Level 4		
Survival Craft and Rescue Boats	Level 2			
Programme Listing	For a list of Training Programmes available for the Sea Transport sector, please visit: www.skillsfuture.sg/skills-framework/sea-transport			

The information contained in this document serves as a guide.