

**SKILLS FRAMEWORK FOR THE SEA TRANSPORT
TECHNICAL SKILLS AND COMPETENCIES (TSC) REFERENCE DOCUMENT**

TSC Category	Cargo Operations					
TSC	Cargo Loading and Unloading					
TSC Description	Perform loading and unloading of cargo to and from ships by planning cargo operations with due consideration for safety precautions, cargo types and proper use of equipment.					
TSC Proficiency Description	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
		STP-CGO-2002-1.2	STP-CGO-3002-1.2	STP-CGO-4002-1.1		
		Operate port equipment for handling (loading, unloading), securing and care of cargo.	Monitor and supervise the operation of port equipment including the handling (loading, unloading), securing and care of cargo or other operations.	Plan and direct the operation of port equipment including the handling (loading, unloading), securing and care of cargo or other operations.		
Knowledge		<ul style="list-style-type: none"> Ship construction and operational features Use of ship deck and equipment on-deck (e.g. ship crane) required for operations Workplace Safety and Health (WSH) policies, procedures and regulations for port and cargo operations Use of automated and/or autonomous equipment required for operations and features of autonomous design and risks Preparations and operations for cargo handling, stowage and carriage Regulations and guidelines, organisational instructions and guidance, and ship contingency plans 	<ul style="list-style-type: none"> Methods for monitoring the loading, stowage, securing and unloading of cargoes and their care during the voyage Methods for ensuring compliance with pollution prevention requirements Methods for ensuring compliance of automated and/or autonomous equipment with regulations and organisation procedures Methods for maintaining seaworthiness of a ship Basic principles of ship stability Features of a ship's structure and the names of key parts Regulations and guidelines, organisational instructions and guidance and ship contingency plans 	<ul style="list-style-type: none"> Methods to plan and ensure safe loading, stowage, securing and care during the voyage and unloading of cargoes Carriage of dangerous goods Methods to control the trim, stability and stress of the ship Methods to monitor and control compliance with legislative requirements Methods to ensure safety and manage operational risks of automated and/or autonomous equipment Measures to ensure safety of life at sea and the protection of the marine environment Methods to evaluate and apply statutory regulations and guidelines, organisational instructions and guidance and ship contingency plans 		

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<p>Abilities</p>		<ul style="list-style-type: none"> • Select the correct type and quantity of equipment and materials to carry out loading and unloading operations • Prepare equipment and verify their working conditions, in accordance with operating practices and safety • Identify and report faults or deficiencies in equipment and materials • Operate equipment and communication systems to complete loading and unloading operations • Perform shut-down procedures and secure the equipment on completion of loading and unloading operations 	<ul style="list-style-type: none"> • Take over and hand over an operational watch, in accordance with established procedures • Organise and supervise the team to ensure loading and unloading operations are carried out effectively and equipment is operated correctly • Ensure the exchange of internal and external information is complete and relevant to the circumstances of the operation • Ensure that operations are carried out in accordance with operational plans and established practices, safety and environmental protection requirements • Ensure procedures for emergencies and contingencies are established and ready for operation when required • Ensure dangerous, hazardous or harmful substances within cargo are correctly handled, in accordance with regulations and codes of safe working practices • Ensure that equipment is correctly shut down and the ship is secure on completion of operations 	<ul style="list-style-type: none"> • Develop operations plan on receipt of instructions for the ship, in accordance with established procedures and legislative requirements • Specify strategies, work methods and activities for ship operations • Ensure staff are briefed on latest work sequences and procedures • Prepare contingency plans for dealing with known contingencies, hazards or special requirements, and to meet safety requirements • Negotiate with external agencies to ensure that loading and unloading operations proceed safely and to schedule • Confirm that procedures for environmental protection, emergencies and contingencies are established and ready for operations, if required • Assess areas of non-compliance to cargo operation procedures to develop corrective measures for future instances of non-avoidance 		
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