

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

TSC Category	Cargo Operations					
TSC	Ship Operations					
TSC Description	Coordinate and support ship operations, including berthing, resupplying, and cargo loading and unloading					
TSC Proficiency Description	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
	STP-CGO-1009-1.1	STP-CGO-2009-1.1	STP-CGO-3009-1.1	STP-CGO-4009-1.1	STP-CGO-5009-1.1	
	Support ship berthing and subsequent operations in the ports	Coordinate ship operations at port	Prepare plans for specific ships' operations	Develop plans to direct the organisation's ship operations	Formulate and review the organisation's key performance indicators to enhance ship operations performance	
Knowledge	<ul style="list-style-type: none"> • Functions and roles of shipping in international trade • Preparation of berthing, including: <ul style="list-style-type: none"> ○ Purpose of ship schedules ○ Notification of Arrival (NOA), confirmation of arrival, passenger ship and height ○ Process of port clearance ○ Preparations prior to ship's arrival ○ Types, features and classification of ships • Concept of ship stability and stress • Importance of monitoring ship fuel consumption, speed and engine trouble • Regulations and requirements relating to ships: International navigational limits <ul style="list-style-type: none"> ○ International Maritime Organisation (IMO) and government 	<ul style="list-style-type: none"> • Components of ship operations plan • Preparation of berthing, including: <ul style="list-style-type: none"> ○ Purpose of ship schedules ○ Notification of Arrival (NOA), confirmation of arrival, passenger ship and height ○ Process of port clearance ○ Preparations prior to ship's arrival ○ Types, features and classification of ships • Procedures for safe loading, stowage, securing and care during the voyage and unloading of cargoes • Carriage of dangerous goods • Methods to monitor and control compliance with legislative requirements • Concept of ship stability and stress • Importance of monitoring ship fuel consumption, 	<ul style="list-style-type: none"> • Components of ship operations plan • Procedures for safe loading, stowage, securing and care during the voyage and unloading of cargoes • Carriage of dangerous goods • Methods to monitor and control compliance with legislative requirements • Statutory regulations and guidelines, organisational instructions and guidance and ship contingency plans 	<ul style="list-style-type: none"> • Components of ship operations plan • Contingency plans for ship operations • Procedures for safe loading, stowage, securing and care during the voyage and unloading of cargoes • Carriage of dangerous goods • Methods to monitor and control compliance with legislative requirements • Statutory regulations and guidelines, organisational instructions and guidance and ship contingency plans • Key performance indicators associated with ship operations • Methods to monitor key performance indicators 	<ul style="list-style-type: none"> • Components of ship operations plan • Contingency plans for ship operations • Key performance indicators associated with ship operations • Methods to monitor and control compliance with legislative requirements • Statutory regulations and guidelines, organisational instructions and guidance and ship contingency plans 	

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	<ul style="list-style-type: none"> ○ Importance of maintaining the statutory survey records and schedules of ships ○ Importance of certificates and documents of ocean-going ships • Stevedorage and literage • Functions of MARINET 	<ul style="list-style-type: none"> • Statutory regulations and guidelines, organisational instructions and guidance and ship contingency plans 				
Abilities	<ul style="list-style-type: none"> • Update ship schedules for arrival and departure times • Coordinate ship berthing and preparations prior to berthing • Monitor port activities to ensure schedules are adhered to • Carry out arrangements for post-fixture support to the ships • Coordinate ship movements, operations and communications • Maintain and update documentation of IMO and government maritime requirements and other relevant ship certificates • Maintain all certificates and documents of ocean-going ships • Update statutory survey records and schedules of ships 	<ul style="list-style-type: none"> • Estimate expected arrival and departure times of ships • Select equipment and materials to carry out operations • Carry out arrangements for post-fixture support to the ships • Coordinate ship movement, operations and communications during berthing • Maintain and update documentation of IMO and government maritime requirements and other relevant ship certificates 	<ul style="list-style-type: none"> • Prepare plan for operations on receipt of instructions for the ship • Negotiate with external agencies to ensure that operations proceed safely and according to schedule • Verify that procedures for environmental protection, emergencies and contingencies on ships are established and ready for operations • Verify that defined procedures for handling dangerous, hazardous or harmful substances on ships are in accordance with regulations and codes of safe working practices • Track progress on vessel operations • Confirm that ships are secure on completion of operations • Record plans for reference 	<ul style="list-style-type: none"> • Specify the most appropriate strategies, work methods and activities for ship operations in the port • Develop plans and procedures for dealing with known contingencies, hazards or special requirements of ships and to meet safety requirements • Develop operational strategies and procedures for compliance by port operators and ship personnel • Develop cargo loading and unloading plans for ships coming into port • Analyse ship operations performance indicators against set targets and propose recommendations for improvements 	<ul style="list-style-type: none"> • Formulate key performance indicators to measure ship operations performance • Monitor operational progress against required quality of work and adherence to both budget and time schedules • Evaluate opportunities for improvements to enhance cargo operations and ship movements • Use outcomes of monitoring activities and feedback from crew members to determine key performance indicators 	

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			<ul style="list-style-type: none"> Maintain operations records in accordance with legislative and organisational requirements 			
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