



TANZANIA BUREAU OF STANDARDS

INTERIM-TECHNICAL SPECIFICATIONS FOR SERVICE RENDERED AT DAR ES SALAAM PORT

TECHNICAL SPECIFICATIONS FOR SERVICE RENDERED AT DAR ES SALAAM PORT

1. Scope

These technical specifications provide service standards which shall be used to measure performance of the Dar es Salaam Port.

2. Terms and Definitions

The following terms and definitions shall be applied under these technical specifications

2.1 Ship Turn Around Time

total time a vessel spends at a port, from entrance to exit. It is calculated from the time of arrival to the time of departure excluding time lost due to ship own convenience.

2.2 Truck turnaround time

total time spent from the time the truck enters the port to the time the truck leaves the exit gate.

2.3 Wagon Removal

total time spent from the time the wagon enters the port to the time the wagon leaves the exit gate.

2.4 Ship Waiting Rate

ratio of ship time at berth and ship time outside; the ratio is determined as follows:

$$\text{Waiting Rate} = \frac{\text{Time Spent Outside Berth}}{\text{Time Spent At Berth}}$$

2.5 Berth Occupancy Rate

percentage of time that berths are in use by ships and it is determined as follows:

$$\text{Berth Occupancy Rate} = \frac{\text{Total Ship Time (days) at Berth} \times 100}{\text{Number of Berths} \times \text{ND}}$$

Whereas ND is the Number of Days in a reporting period

2.6 Working Time over Time at Berth

extent ship being worked while at a port. It is determined as follows:

$$\text{Working Time Over Time at Berth} = \frac{\text{Working Time}}{\text{Time at Berth}}$$

2.7 Cargo Dwell Time

time (in days) elapsed cargo was unloaded from a ship until it exits the port or vice versa.

2.8 Gang Productivity

measure of labor productivity measured by number of units or tons performed by a group of laborers (i.e., gang) in a shift.

2.9 Gross Moves

measure of productivity of the main equipment for container loading and unloading per unit time without deducting time lost due to stoppages for any reason. Equipment considered in this case are Ship to Shore Gantry Crane (SSG) or Mobile Harbor Crane (MHC).

2.10 Ship Productivity

measure of total productivity of a port in cargo handling on a ship per day. It is measured in units or tons per ship – day.

3. Service Standards

Standards for services rendered at the Port of Dar es Salaam shall be as per Table.1

Table 1. Recommended Service Standards for Dar Es Salaam Port

SNO	KPI	Unit	Recommended Standard	Remarks
1.	Ship Turnaround Time			
1.1	<i>Containers</i>	Days	3	Less is better
1.2	<i>General Cargo</i>	Days	3	Less is better
1.3	<i>Dry Bulk</i>	Days	5	Less is better
1.4	<i>Liquid Bulk</i> <ul style="list-style-type: none"> • <i>KOJ</i> • <i>SPM</i> 	Days	4 6	Less is better
2.	Ship Waiting Rate	Ratio	1	Value close to 0 is better
3.	Working Time over Time at Berth	Ratio	1	Value close to 1 is better
4.	Berth Occupancy Rate			
4.1	<i>Containers</i>	Percent	60	Less is better
4.2	<i>General cargo</i>	Percent	70	Less is better
4.3	<i>Liquid Bulk</i>	Percent	70	Less is better
5.	Cargo Dwell Time			
5.1	<i>Local</i>	Days	5	Less is better
5.2	<i>Transit</i>	Days	14	Less is better
6.	Gang Productivity			
6.1	Dry Bulk Cargo <ul style="list-style-type: none"> • <i>Other than Fertilizer</i> • <i>Fertilizer</i> 	Tons/gang-shift	1000 600	More is better
6.2	General Cargo	Tons/gang-shift	500	More is better
6.3	Motor Vehicles	Units/shift	960	More is better
7.	Ship Productivity			
7.1	Dry bulk cargo			More is better

SNO	KPI	Unit	Recommended Standard	Remarks
	<ul style="list-style-type: none"> • <i>Other than Fertilizer</i> • <i>Fertilizer</i> 	Tons/ship-day	9,000 5,400	
7.2	General cargo	Tons/ship-day	4,500	More is better
7.3	Motor Vehicles	Units/ship-day	2,880	More is better
7.4	Moves per ship working hour		75	More is better
8.	SSG Gross Moves	Moves/hour	30	More is better
9.	MHC Gross Moves	Moves/hour	15	More is better
10.	Truck turnaround time			
10.1	<i>Containers</i>	Hours	1	Less is better
10.2	<i>Direct delivery cargo</i>	Hours	1	
10.3	<i>Other cargo</i>	Hours	3	Less is better
11.	Wagon Removal			
11.1	<i>Containers</i>	Hours	2	Less is better
11.2	<i>Other cargo</i>	Hours	12	Less is better
12.	ICD Transfer			
12.1	<i>Container exit from Terminal</i>	Hours	1	Less is better
12.2	<i>Complete Transferring allocated lot per ship</i>	Hours	48	Less is better
13.	Terminal Yard Density	Percent	50	Less is better

4. Abbreviations

4.1 ICD- Inland clearance Deport

4.2 MHC- Mobile Harbor Crane

4.3 SSG- Ship to Shore Gantry Crane