

Schedule 2 Operations

1 Introduction

The following requirements will be incorporated into the contract between the Contractor and the owner/operator of the OG Vessel and the Parties agree that the Master of the Transshipment Vessel has full control of operations and can give lawful instructions on behalf of the Contractor with which the Master of the OG Vessel will comply.

2 Transshipment Anchorage Requirements

2.1 Masters of OG Vessel's contracted to load at the Transshipment Anchorage shall give ninety six (96), seventy two (72), twenty four (24), twelve (12) and six (6) hours' notice of ETA to the Transshipment Vessel and Contractors Takoradi Agent.

2.2 Masters shall send their cargo loading sequence to the Contractors Takoradi Agent and the Transshipment Vessel prior to nomination for Transshipment Anchorage approval and again as confirmation at first ETA. The following information should be transmitted prior to nomination for Owner's approval and again as confirmation at first ETA.

- A. Flag
- B. Year of build
- C. SDWT, LOA, Beam, Draft fully loaded to SDWT
- D. Number of holds and hatches (including crane capacity and cargo gear certificate)
- E. Grain capacity and cubic in total and by holds
- F. Type of hatch covers
- G. Vessels class
- H. P & I Club
- I. Present position, itinerary, ETA at loadport and expected cargo intake
- J. Last three cargoes and loading ports of vessel incl. dates
- K. Written confirmation stating that vessel, owners and/or Management are not covered by any U.N. sanctions
- L. Written confirmation stating that vessel and/or owner has in effect a Drug and Alcohol abuse policy
- M. Distance from railing to opposite side of hatchcoaming (airdraft WLTHOHC coaming in full ballast condition)
- N. Deballasting capacity (rate per hour m3/hr)

- 2.3 When the OG Vessel is in all respects ready to load, a Notice of Readiness must be given at any time of day or night to the Transshipment Vessel, via VHF channel 16 and in written form (Telex/Email). Should the Masters fail to give the above notices of the OG Vessels' ETA at the Transshipment Anchorage the OG Vessel acceptance may be delayed.
- 2.4 For the entire operation, the OG Vessel's engines should remain on immediate stand-by and a close watch must be kept on moorings, paying particular attention to chaffing points.
- 2.5 The port agent for OG Vessels must be nominated by the Contractor.
- 2.6 The OG Vessel will agree with the Transshipment Vessel a VHF working channel for communication during the loading, preferably channel N° 72.
- 2.7 If the OG Vessel requires husbanding or other services such as water, provisions and fuel at the Transshipment Anchorage, the Master shall apply for permission to the Transshipment Vessel. This must be done in advance as these items are not readily available at the Transshipment Anchorage. All requests must be made through the Owners.
- 2.8 The OG Vessel shall have clear and unobstructed holds and shall be suitable for loading manganese ore in bulk. Vessels to be self-trimming, single deck bulkcarriers, classed Lloyd's 100 A.1 or equivalent, fully suitable for the carriage of manganese ore in bulk. Vessels to have no centre line beams or bulkheads in any hold or hatchways. Vessels hatch covers and hatchways, if any, shall be removed at loading port at owner's expense. Vessels bulkheads not to be horizontally corrugated.
- 2.9 All OG Vessels must comply with Ghanaian local requirements as well as the requirements and regulations of the Transshipment Vessel.
- 2.10 All OG Vessels to call at the Transshipment Anchorage must be classified by an IACS member. "Conditions of Class".
- 2.11 All OG Vessel's must be minimum Rightship 3 star rated.
- 2.12 If the Contractor wishes to nominate an OBO, the vessel should have a valid gas free certificate whilst alongside the loading berths. The certificate shall cover all compartments including slop tanks, but excluding bunker oil tanks. The vessel shall have an operational inert gas system on board. Contractors shall have the right to declare the notice of readiness invalid and that laytime shall not commence until gas free certification has been obtained by the owner and loading commences.
- 2.13 Each OG Vessel's hold must be clean to receive Cargo on presentation at the Transshipment Vessel for loading. The OG Vessel's engine and control systems must be working properly.

Allowable dimensions of OG Vessels acceptable to load at the Transshipment vessel are as follows:

- LOA 250 M
- Beam 45m

2.14 Maximum height from waterline to top of railing at OG Vessel's side or top of hatch coaming: 14.00 meters.

2.15 The Transshipment Vessel can accommodate OG Vessel's (subject to ballast and Cargo quantity loaded) up to a maximum hatch coaming height of 15.5 metres,

3 Arrival and Formalities

Arrival and Departure draft shall be submitted by the Master of the OG Vessel to Master/Loadmaster of the Transshipment Vessel prior to the commencement of cargo loading, these drafts along with other formal arrival detail shall be submitted in written form.

4 Berthing Operation

4.1 Masters of OG Vessels shall be required to berth and unberth their vessels in weather conditions considered safe by the Master/ Loadmaster of the Transshipment Vessel; provided, however, that the responsibility for the safe and efficient execution of these operations shall always remain on the Master of the OG Vessel.

4.2 If berthing or tug assistance is needed and/or required by pilots this is to be arranged by Owners/Agents of each OG Vessel at their cost, bearing in mind that operations must not be delayed. Owners of the OG Vessel to be responsible for all costs, time lost and all other consequence arising from failure to order tugs, pilots, linesman in a timely manner.

4.3 Pilots in consultation with Master/Loadmaster will determine the requirements for tug assistance.

4.4 Any tugs nominated for operations at the Transshipment Anchorage must be approved by the master of the Transshipment Vessel and cost for same to be for account of OG Vessel.

4.5 The OG Vessel shall berth with her port side against the starboard side of the Transshipment Vessel. Large pneumatic-type fenders must be attached along the starboard side of the Transshipment Vessel, to ensure smooth berthing , avoiding contact between Vessels.

4.6 If appropriate, the OG Vessel shall be responsible for warping itself alongside the Transshipment Vessel using its own winches/lines. Mooring lines shall be worked by powered winch drums and shall preferably be of synthetic fibre. Wire ropes must not be used.

4.7 The berthing arrangements must always be acceptable to the Master of the Transshipment Vessel. Before contact to the fenders, the OG Vessel will receive instruction from the

Transshipment Vessel for proper fore and aft positioning to assure complete reach of the hatches by the ship loader boom.

4.8 It is the responsibility of the OG Vessel to pass suitable lines and any additional mooring lines as may become necessary under changing conditions and to attend all mooring lines to maintain the assigned fore and aft position of the vessel and to hold the OG Vessel firmly against the fenders at all times with minimal movement. It is the responsibility of the OG Vessel to ensure that all the mooring equipment, such as winches, fairleads, rollers, etc., are in good working condition at all times while alongside the Transshipment Vessel.

4.9 OG Vessels shall be ready to carry the berthing manoeuvre to berth on the starboard side of the Transshipment Vessel, with enough lines distributed the following manner:

- Four (4) bow lines
- Two (2) breast line on the forecastle
- Two (2) springs on main deck fwd
- Two (2) springs on main deck aft
- Three (3) stern lines
- One (1) breast line aft
- One stern line to aft mooring buoy

Total of 15 lines.

4.10 OG Vessel must also ensure that a good supply of the heaving lines and messengers are available fore/aft and on the main deck where spring lines winches are located

4.11 The standard mooring pattern will call for two headlines to be passed first, followed by forward spring, aft springs, fore breast lines. Always send ropes one by one and use long messenger lines as current and vessel's interaction makes this operation difficult sometimes. This procedure and rope arrangement may be changed by a pilot to better suit prevailing conditions. When deploying moorings, try to avoid using the starboard bow fairleads because of the greater chafing and eventual parting of lines.

4.12 An anchor must always be on standby. Under the mooring arrangement it must be the starboard anchor.

4.13 The OG Vessel's anchors are not to be used during the approach or berthing manoeuvre due to the danger that they may foul the Transshipment Vessel's mooring system unless otherwise authorized by Master of the Transshipment Vessel.

- 4.14 OG Vessel's Masters will be responsible for complying with the "International Convention for the control and management of Ships ballast water and sediments adopted in the MEPC resolution IMO-A-868 (20)" and Ghana local regulations.
- 4.15 The Transshipment Vessel's Master/Loadmaster must be informed of any problems or delays with the OG Vessel's ballast systems and de-ballasting must not delay loading operations. Time taken for delay due to de-ballasting will not count as laytime or transfer station loading time and the OG Vessel will be responsible for any related standby or other costs.

5 Loading / Conveyor belt Operations

- 5.1 The Transshipment Vessel employs a gravity fed belt discharging system with final cargo transfer to the ocean vessel being via a 57m (extendable to 75m) conveyor boom.
- 5.2 Before loading commences there should be an agreement between the Master of OG Vessels and Master /loadmaster of Transshipment Vessel as to the rate of loading and sequence in which the Cargo is to be distributed so as to achieve the final loading plan (BLU CODE 3.1.2 and 4.1.1.1). Master of the OG Vessel must provide to the Transshipment Vessel a copy of the loading plan per BLU 4.3.1.
- 5.3 Cargo is to be loaded in accordance with IMO BLU code. However, the loading plan for OG Vessels should be prepared with no more than two (2) pours per hold for primary loading and allowance for final trimming to two holds.
- 5.4 Pour quantities are measured by the Transshipment Vessel's weight scale and checked by OG Vessel deadweight and displacement surveys. The Master of the OG Vessel is requested to constantly watch their OG Vessel's trim and draft to comply with relevant loading conditions, although swell and OG Vessel's interaction may affect draft accuracy.
- 5.5 Master of OG Vessel is responsible at all times for quantity loaded and for ensuring the correct figures are reflected in mate's receipts for use on bills of lading.
- 5.6 If over loading occurs, any and all consequences related to the over-loading will be at OG Vessel's own risk, expense and complete responsibility. Such additional Cargo loading shall be governed and constructed under the corresponding contract and not this Agreement.

6 Documentation Procedures

Statement of Facts at Transshipment Anchorage to be issued and signed by Master of Transshipment Vessel and countersigned by Master of OG Vessel or it's agent.