



**Forth Ports Limited**

**Port of Dundee**

**Rig Move Guidelines**

<b>FORTH PORTS LIMITED</b>	<b>Document ID</b> FP PMSC OP 24/02	<b>Authorised By</b> HMD	<b>Original Date</b> March 2014
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## LIST OF AMENDMENTS

<b>DATE NUMBER</b>	<b>PAGE</b>
<b>26<sup>th</sup> March 2014 – New Document</b>	
<b>20<sup>th</sup> September 2016 – Para 4.1.1 and 4.1.2 added</b>	<b>8</b>
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# 1 Introduction

Rig moves are carried out in the Port of Dundee where the pilots and management team have a high level of experience in such manoeuvres. Both jack-up and semi-sub rigs can be berthed alongside and there are a number of berthing options for jack-ups, but in general semi-sub are only berthed at Prince Charles Wharf. These guidelines are intended to allow all parties involved to successfully plan and execute these complex manoeuvres.

These guidelines should be read in conjunction with the Port of Dundee Marine Guidelines and Port Information <http://www.forthports.co.uk/#/marine/information/>

## 2 Pre-Arrival

### 2.1 Planning Meetings

The following is required to be discussed, agreed and confirmed during Pre-Arrival Meetings. It is recommended that these meetings be arranged with the Harbourmaster to clarify all issues.

- Procedures for Prioritising Rig Movements and the requirement to advise all parties/operators of prospective movements within the Tay.
- Guidelines on the extent of the scope and extent of the tow for each towing vessel (e.g. secure port quarter and remain connected until the Fairway Buoy)
- Disposition of towing vessels and towing configuration (e.g. – over bow/ over stern) and any proposed changes in configuration.
- Planned pilot disembarkation position and impact on towing vessels – e.g. towing vessel required to pull clear to allow access for pilot cutter
- Towing vessel masters will confirm their understanding of the Pilots' instructions.
- Other planned movements in the river.

A pre-departure meeting will be held with the harbourmaster, pilot(s), tow master(s) and towing vessel masters as a briefing prior to the planned operation.

### 2.2 Priority of Movements

An outbound Rig, going out to location will, in general, have priority over an inbound Rig, subject to safety issues.

However this may depend on the following factors:

- Will the rig be able to complete its planned move?
- Are towing vessels in place?
- Has the rig declared that it is ready to move?

The Harbourmaster will issue a Large Vessel Movement message prior to arrival/departure. Restrictions to estuary movements will be put in place when arrival/departure confirmed.

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An indicative booking should be received as soon as possible, but no later than one week before arrival. At this stage, all parties will be advised regarding weather conditions, prospective large vessel movements, which require high water and/or daylight operation and where there may be an issue of multiple bookings.

Where possible, all attendant vessels should arrive in port on the previous high tide at the latest. A pilot may be required for some lead tug movements, subject to LOA. Note – movement within the port area is permitted for attendant vessels less than 40 metres in length without a pilot on board, however clearance is required from Dundee Harbour Radio prior to any movement.

Vessels requiring boatmen are requested to give at least 1 hour notice. Towing vessels shall request from Dundee Harbour Radio clearance to move subject to draft, depth of water on the tide gauge prior to departing a berth or anchorage to proceed to a rig to commence connecting up towlines.

### **2.3 Confirmation/Cancellations**

Arrivals/departures must be confirmed/cancelled at least 6 hours before high water on Day of intended movement, unless weather conditions deteriorate significantly.

### **2.4 Weather Parameters**

Rig Move Weather Parameters:

- A maximum sustained wind speed of 15 knots, with a maximum gust of 20 knots.
- Wind speed to be measured using 25 metres as a datum. This height corresponds to the level of the Tay Road Bridge anemometer.
- Daylight hours for passage between Lady Buoys and the Newcome Buoy,
- Visibility minimum 2 nautical miles.
- Maximum swell at the bar less than 0.5m

Conditions will be assessed and if necessary checks carried out to confirm that parameters are acceptable for movements.

## **3 Pilotage**

### **3.1 Inbound**

One Pilot will board the lead towing vessel and one pilot will board the rig 4 hours before high water, Dundee. The rig should commence the transit to Dundee no later than 3<sup>1</sup>/<sub>2</sub> hours before high water, Dundee.

Speed of tow during transit will be dependent on towing vessels and prevailing conditions.

All towing vessels are made fast prior to passing the fairway buoy.

### **3.2 Outbound**

On departure the duty pilot will board the lead towing vessel and the 2<sup>nd</sup> Pilot will board the rig, 3 hours before high water, Dundee. In normal circumstances all other towing vessels are made fast prior to departure and the rig should leave the berth no

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later than 2<sup>1</sup>/<sub>2</sub> hours before high water, Dundee. Depending on the rigs configuration alongside, the departure may have to be carried out in a two stage operation and this will be explained at the pre-departure meeting.

### **3.3 Pilot /Tug communications**

Tug operations VHF Channel 14 or other agreed channel.

Dundee Harbour Radio operates on VHF Channel 12.

Cancellation point for departure will be at 2 hours before HW if the rig is not underway.

### **3.4 Boarding and Landing of Pilots**

Pilot embarkation or disembarkation to the rig will be via an approved means of access as per pilot boarding regulations, in a position that is flat, free from obstructions and suitable for a pilot vessel to come alongside. The guidance in the UKMPG Boarding and Landing Code will be followed at all times.

### **3.5 Contingencies**

In the event of an emergency situation arising i.e. loss of tug power, the rig will be towed to the anchorages at either Buddon Anchorage or Craig Anchorage, if this is not possible the rig is to be stabilised in a safe location clear of underwater obstructions and “jack up”. A location at Buddon has been successfully used – 56 27.4N 002 44.5W.

### **3.6 Two Tide Operation**

There are differing classes of jack-up rigs which may not tow as well due to their size and the wind effect. It should be noted that these rigs may not be able to sustain a sufficient speed over the ground that would allow them to complete the move in a single tide. In these cases the rig can pin at the position indicated in **3.5** and complete the move on the next suitable tide.

## **4 Towage**

Tugs draft are to be less than 6.5m.

All towing vessels must be sufficiently manoeuvrable to be capable of working cross-tide in the River. All tugs must be available for briefing and audit at least 12 hours before the rig move. For rigs arriving in Dundee, tugs which are already part of the sea tow can be briefed by the tow master in consultation with the pilots.

### **4.1 Harbour Tugs**

The tug configuration will depend on location and berth and whether port side/starboard side and stern to and any other vessels / rigs in close proximity.

For close manoeuvring on and off the berth, 4 harbour tugs of more than 70 tonne bollard pull each are required, although two of the tugs may be 60 tonne bollard pull in certain conditions following discussions with the Harbourmaster and Pilots. The final towage configuration will be dependent on berth, and the size and type of rig and whether it is permitted to walk the legs for a berthing or positioning manoeuvre. It is recommended that for arrival, the harbour tugs should be able to tow over the bow. For departure a mix of over the bow and over the stern can be used. All harbour tugs

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should be highly manoeuvrable and preferably ASD (Azimuth Stern Drive) or other tractor type tugs should be used.

All towing vessels engaged in rig move operations must complete the Towage Audit Declaration before undertaking towage operations in the Port of Dundee. ([Refer to Appendix B](#))

- 4.1.1 The harbour tug contractor or rig mover must confirm that the tug masters employed have suitable qualifications and experience in towage operations.
- 4.1.2 The tow master should sign off on the remote towage audit in Appendix B

## 4.2 **Lead Tug**

The lead tow vessel will be an anchor handling type vessel capable of around 150 tonne bollard pull. These will also be limited to a 6.5m maximum draft and vessels with drop down azimuth thrusters are not suitable unless they can demonstrate that they are capable of working across the tides without using the azimuth thruster. Lead tow vessels should not operate in DP mode when the towline is attached to the rig

All towing vessels must be in possession of a corrected up to date edition of Admiralty Chart Number 1481-River Tay.

If berths are required for the towing vessels, this should be advised to the Harbourmaster at the earliest opportunity and Proposed Vessel Movement Forms completed and submitted to the Harbourmaster and Duty Harbour Master at Forth and Tay Navigation Service (FTNS) ([ftns@forthports.co.uk](mailto:ftns@forthports.co.uk)).

Vessels requiring boatmen are requested to give at least 1 hour notice. Towing vessels shall request clearance from Dundee Harbour Radio to move subject to draft, depth of water on the tide gauge prior to departing a berth or anchorage to proceed to a rig to commence connecting up towlines.

## 5 **In Port**

### 5.1 **Leg Lift Procedure**

The leg lift procedure and sequence is to be addressed between towing master, rig manager and pilots.

A test pull of the legs will be carried out, within 24 hours of departure, this to be confirmed to the port. If for operational purposes it is not practical to carry out this procedure, then this must be discussed with the Harbourmaster and the duty pilot prior to the operation.

Shore moorings also to be removed.

The maximum draft of the rig is 6.5m, which must be confirmed by the rig managers. Variations in draught will be assessed, as this will affect movement timings.

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## **5.2 Notification & Notice to Mariners**

The Harbourmaster, Dundee will notify Dundee Airport air traffic control 24 hours prior to the arrival or departure of any jackup rig.

Once an inbound rig is safely alongside a notice to mariners will be issued.

## **5.3 Aircraft Warning Lights**

It should be noted that the Port of Dundee lies within a statutory air corridor and any obstructions over 100m above sea level (MHWS) are required to display high intensity all round red lights during the hours of darkness. The legal requirement for displaying Obstruction lights is contained in the Air Navigation Order CAP393, Part 28 Lights and Lighting. Number 219 Lighting of en-route obstacles.

“The person in charge of an en-route obstacle must ensure that it is fitted with Medium Intensity Steady Red Lights positioned as close as possible to the top of the obstacle and at intermediate levels spaced so far as practicable equally between the top lights and ground level with an interval of not more than 52 metres.

The person in charge of an en-route obstacle must, ensure that by night the lights required to be fitted by this article are displayed.

At each level on the obstacle where lights are required to be fitted, sufficient lights must be fitted and arranged so as to show when displayed in all directions.”

A Medium Intensity Steady Red Light is an ICAO medium intensity Type C light of at least 1500 candela. This is commonly a light fitting of 116Watt (incandescent) or 20Watt (LED).

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## APPENDIX A

### **Procedure for Auditing and Licensing Towing Vessels Engaged in Rig Move Operations**

On receipt of a confirmed arrival of a Rig, the Rig Move Arrivals and Departures Guidelines will be forwarded to the Rig Operator and the Rig Moving Contractor.

A Pre-Arrival/Departure Meeting will be arranged to occur approximately one week in advance of arrival/departure. During this meeting towage requirements will be confirmed together with guideline requirements on weather parameters; indicative tides and timings and towage configurations and limitations.

The Rig Move Contractor will be issued with the Audit Declaration and be required to submit such declaration for each nominated towing vessel.

Nominated tugs will be advised at the earliest opportunity and the condition, suitability of the tugs, and the competence of the crew are to be advised to the Port of Dundee. This shall be done using the Towage Declaration below.

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## APPENDIX B

### Towage Audit Declaration

ARRIVAL	<input type="checkbox"/>	DEPARTURE	<input type="checkbox"/>
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Company/Tug Details	
Rig Coordinating Company Name	
Nominated Tug(s)	
Towage Company	
Company Number	
Registered Office	
Tug Name	
Tug UN Number	
Length Overall	
Draft	
Auditor	
Date	

ITEM	COMPLY	
	YES	NO
<b>General</b>		
ISM /SMS Issued by Dated		
RIGMOVE Arrival./Departure Guidelines Briefed		
<b>Employers Liability of Insurance – Or Equivalent</b>		
Copy displayed at all relevant areas		
<b>Safe System of Work</b>		
Application of Company Safe System of Work procedures.		
<b>Safety Information</b>		
PPE Records		
Lifejacket Test Certificates		
Risk Assessment – recording and availability.		
Tool Box Talks/ Awareness Records – recording and availability.		
<b>Towage Operations</b>		
Understanding of “Port of Dundee Rig Move Guidelines” and a copy available on board		
Confirm understanding of Fort Ports Towage Guidelines		
Reduced Visibility Parameters and Operations.		
Rig move contractor to confirm that the Master is made aware of tidal/current influences in River Tay		

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ITEM	COMPLY	
	YES	NO
<b>Personnel Operations Instructions/ Procedures</b>		
Procedure covering pre/ post operation Check Lists		
Procedure covering Vessel Log Book		
Communications Procedures		
Confirmation that Master has a full and effective understanding and conversant with the English language and is capable of communicating with Pilots/Tow master		
Procedure covering Passage Planning.		
Port/ Terminal Closure Criteria		
<b>Tug Maintenance</b>		
Certification Standard –		
Procedure covering Maintenance & Recording including defect reporting		
Procedure covering Bunkering Operations – Safeguards, etc.		
Procedure covering Recording of bunkering Operation.		
<b>Personnel Particulars</b>		
Tug Manning Levels:		
Crew Qualifications:		
<b>Crew Training</b>		
Formal Training Procedure for each Rank		
<b>Emergency Training &amp; Recording</b>		
Man Overboard: Written procedure		
Recording of Exercise details.		
Use of Oil Pollution Equip: Written procedure.		
Recording of Exercise details.		
Use of Fire Fighting Equip: Written procedure		
Recording of Exercise details.		
<b>Towline Emergency Release Info:</b>		
* Activation Position Details		
* Release Details - Type		
* Drill Frequency Details		

SIGNATURE OF DECLARATION		
<b>Master of Towing Vessel</b> NAME (PRINT)	<b>SIGN</b>	
	<b>DATE</b>	
<b>Tow Master / Rig Mover</b> NAME (PRINT)	<b>SIGN</b>	
	<b>DATE</b>	
<b>Harbour Master</b> NAME (PRINT)	<b>SIGN</b>	
	<b>DATE</b>	

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## TUG DATA

<b><u>Vessel</u></b>	
<b>Build/ IMO</b>	
<b>Type of Propulsion</b>	
<b>Power (BHP)</b>	
<b>Bollard Pull (Tonnes)</b>	
<b><u>Vessel Certification Details</u></b>	
<b>Who Issues</b>	
<b>Certificate</b>	
<b>Expiry Date</b>	
<b>Restrictions/ Limits of Operation</b>	
<b><u>Documentation</u></b>	
<b>Log Book Contents</b>	
<b>Radio Communication Equipment</b>	
<b>Navigational Charts – 1481 Required</b>	
<b><u>General Condition of Vessel</u></b>	
<b>Remarks:</b>	<b>Observations –</b>
<b>Confirmation from Rig Mover / Tow master</b>	
<b>Harbour Master  Manager - Comments</b>	

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