



# ABP South Wales and River Usk Towage Guidelines

**May 2024**

## Document Control

Version	Location	Owner	Issued By	Date
1.0	Electronic	Cardiff LPS	Rod Lewis	01/2017
1.1	Electronic	Cardiff LPS	William Barnes	23/10/2017
1.2	Electronic	Cardiff LPS	Tom Batchelor	23/01/2018
1.3	Electronic	Cardiff LPS	Tom Batchelor	05/06/2018
2.0	Electronic	Cardiff LPS	Tom Batchelor	21/09/2018
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4.0	Electronic	Cardiff LPS	Mark Bosworth	31/10/2023
5.0	Electronic	Cardiff LPS	Mark Bosworth	31/05/2024

## Version History

Version	Reason for change	Name	Date
1.0	Major Revision – New Issue	Rod Lewis	01/2017
1.1	Amendments to Swansea towage requirements	William Barnes	23/10/2017
1.2	Amendments to Port Talbot Towage requirements	William Barnes	23/01/2018
1.3	Amendments to bow thruster requirements, role titles and layout	Tom Batchelor	05/06/2018
2.0	Correction made to note f (Newport) and Swansea towage guidelines revised.	Tom Batchelor	21/09/2018
3.0	Amendments to Southeast Wales towage guidelines, procedure in restricted visibility & Port Talbot towage requirements.	Tom Batchelor	12/02/2019
3.1	The Port Talbot table was brought in line with written guidelines.	Tom Batchelor	06/12/2019
3.2	Correction to Port Talbot Sailing guidelines	Tom Batchelor	30/01/2020
4.0	Section 5.0 – Port Talbot Tidal Harbour Towage Guidelines/ Minimum Tug Requirements - Harbour Inwards PST, PST Dockings and Sailings	Mark Bosworth	31/10/2023
5.0	Major Revision – New Issue	Mark Bosworth	31/05/2024

## 1.0 Document Control

### 1.1 Approval and issue

The South Wales Divisional Harbour Master has approved this document. As a major revision, it has been designated a new issue number.

### 1.2 Amendment procedure

As this document is reviewed over time, it may be necessary to amend its content and procedures. Such amendments will only be made with the prior consent and approval of the South Wales Divisional Harbour Master. This document will be maintained as an electronic document and will be available for all port users and stakeholders to view in PDF format on the South Wales Ports website.

### 1.3 List of document holders

An electronic master copy of this document will be maintained at Cardiff LPS.

## 2.0 Introduction

The purpose of this document is:

- To comprehensively document written procedures for harbour and escort towing within the ABP South Wales and/or Newport Harbour Statutory Harbour Authority (SHA) areas of jurisdiction
- To fulfil the requirements of the Port Marine Safety Code and the ABP Group and Regional Port Marine Safety Management Systems about towage. Accordingly, this document lays down criteria that towage operators, their management and towage users should meet.

The following should be noted:

- These guidelines have been prepared after consultation with towage users and providers in the ABP South Wales and/or Newport Harbour SHA areas of jurisdiction.
- There will be circumstances where towage operations must be performed outside these guidelines. Deviation must only occur after consultation with and the sanction of the Divisional Harbour Master or Pilotage Manager/Deputy Harbour Master, South Wales or an appropriate marine officer who has been delegated.
- These guidelines will be reviewed as required.

## **3.0 Administration and Allocation**

### **3.1 Towage Providers**

Any towage provider who wishes to provide towage services in the ABP South Wales and/or Newport Harbour SHA jurisdiction areas must satisfy the harbour towage licencing procedure. This procedure confirms that the towage operator's operations comply with statutory safety management procedures and the requirements of the PMSC.

The Divisional Harbour Master must be provided with the following documents as part of the above licencing process.

- A copy of (or electronic link to) the towage provider Safety Management System
- Operational Information on each tug to be employed.
- Certificates of Class (Hull and Machinery)
- Flag state Safety Equipment Certificate
- Load line Certificate (if applicable)
- Recent bollards pull test certificate.

In addition to the above, for tugs that may be employed in an active Escort role.

- Appropriate Stability information.

### **3.2 Tug Crews**

All Tugs operating in the ABP South Wales and/ or Newport Harbour SHA areas of jurisdiction must be manned in accordance with flag state requirements and at a safe level with regard to crew number.

### **3.3 Notes on Towage Guidelines**

It should be borne in mind by Masters Owners, Operators, Charterers and Agents that the advice given in these guidelines is based on the following.

- A minimum 40-tonne bollard pull for the "made fast" primary tugs.

Under normal conditions, the guidelines can be described as the lowest common denominator with respect to the ABP South Wales and/or Newport Harbour Towage requirement and can be considered a baseline guide.

However, considerable variation in vessel shape condition and manoeuvring capability is recognised. Therefore, the baseline towage requirement has been further refined to consider manoeuvring aids such as thrusters and high-lift rudders. vessel. A database of assessed vessels will be maintained at Cardiff LPS, which may further refine towage requirements for regular calling vessels.

The following will be considered when assessing any variation from the towage guideline.

- The Draft and Trim of the Vessel
- The expected manoeuvre to be undertaken
- The Minimum UKC expected during the estuary passage and dock system
- Tidal range (spring or neap)
- Forecast and actual weather conditions
- Expected sea and swell conditions at lock / Harbour entrances
- Type of Rudder
- Manoeuvring aids, thrusters' type, number, and power.
- Type of Main propulsion
- Type of steering system and rudder(s)
- Windage area
- Physical dimensions concerning Gross Tonnage (GT)
- Any unusual vessel design features
- SWL of Leads and Bollards
- Any reported defects
- Type of main engine
- Any lock restrictions in force

The following tables have been drawn up using information obtained from previous tug use, which brings a more practical approach to tug allocation.

The tables are entered according to the vessel's length and port, which gives the required tugs.

Referencing the table with the **operational** manoeuvring aids the vessel is fitted with, and whether loaded or in ballast, it will refine the tug requirements.

Specialist vessels such as cruise vessels and vessels of unusual design will require an individual assessment.

It should be borne in mind by vessel Masters, Owners, Operators, Charterers and Agents that these guidelines assume that any vessel engaging the use of a tug will have a centre lead configuration forward and aft with a minimum SWL of 20 tonnes.

It is the responsibility of the vessel Master or Agent to inform LPS Cardiff when a vessel does not meet the above criteria. If the above criteria are not met, Harbour Masters's approval will be required.

## Tug Allocation Table

### Docking

Length	Port	Notes	Draft	No Aids	Bow Thruster		High lift rudder or stern thruster with a Bow Thruster power of:			Twin Screw or Azipod with suitable Bow Thruster	
					Up to 300KW	300KW+	Up to 300KW	300-500KW	1000KW+		
<90m	Barry	(a)(b)(c)	Ballast							—	
			Loaded								
	Cardiff	(a)(b)(c)	Ballast							—	
			Loaded								
	Newport	(b)(c)(e)	Ballast							—	
			Loaded								
90m To 100m	Barry	(a)(b)(c)	Ballast	1+0						—	
			Loaded	1+1							
	Cardiff	(a)(b)(c)	Ballast	1+0							—
			Loaded	1+1							
	Newport	(b)(c)(e)	Ballast	1+0							—
			Loaded	1+1							
100m To 115m	Barry	(a)(b)(d)(c)	Ballast	1+0	1+0					—	
			Loaded	1+1	1+1						
	Cardiff	(a)(b)(c)	Ballast	1+0	1+0						—
			Loaded	1+1	1+1						
	Newport	(b)(c)(e)	Ballast	1+0	1+0						—
			Loaded	1+1	1+1						
115m To 130m	Barry	(a)(b)(c)	Ballast	2+2	1+0	1+0	1+0			—	
			Loaded	2+2	1+1	1+1	1+1				
	Cardiff	(a)(b)(c)	Ballast	2+2	1+0	1+0	1+0			—	
			Loaded	2+2	1+1	1+1	1+1				
	Newport	(b)(c)(e)(f)	Ballast	2+2	1+0	1+0	1+0			—	
			Loaded	2+2	1+1	1+1	1+1				
(a)	All vessels carrying chemicals in bulk should engage at least one tug in a secure mode.										
(b)	On their first visit, all vessels carrying marine pollutants in bulk should engage at least one tug in secure mode.										
(c)	A steady wind speed of 20Kts may necessitate an additional tug if not already allocated.										
(d)	Vessels required to go back through the compass passage will require 3 tugs.										
(e)	Vessels with a>15.0m beam when transiting the cut Loaded or in a steady wind speed of 20kts will require the use of a tug.										
(f)	Vessels of over 122m without manoeuvring aids will require a tug when in North Dock.										

## Tug Allocation Table

### Docking

Length	Port	Notes	Draft	No Aids	Bow Thruster		High lift rudder or stern thruster with a Bow Thruster power of:			Twin Screw or Azipod with suitable Bow Thruster
					Up to 300KW	300KW+	Up to 300KW	300-500KW	1000KW+	
130m To 150m	Barry	(a)(b)(c)	Ballast	2+2	2+2	2+2	2+2	1+0	1+0	—
			Loaded	2+2	2+2	2+2	2+2	1+1	1+1	
	Cardiff	(b)(c)(d)	Ballast	2+2	2+2	2+2	2+2	1+0	1+0	—
			Loaded	2+2	2+2	2+2	2+2	1+1	1+1	
	Newport	(b)(c)	Ballast	2+2	2+2	2+2	2+2	1+0	1+0	—
			Loaded	2+2	2+2	2+2	2+2	1+1	1+1	
150m To 175m	Barry	(a)(b)(c)	Ballast	2+2	2+2	2+2	2+2	2+2	2+1	—
			Loaded	2+2	2+2	2+2	2+2	2+2	2+1	
	Cardiff	(b)(c)(d)	Ballast	2+2	2+2	2+2	2+2	2+2	2+2	—
			Loaded	2+2	2+2	2+2	2+2	2+2	2+2	
	Newport	(b)(c)(e)	Ballast	2+2	2+2	2+2	2+2	2+2	2+2	—
			Loaded	2+2	2+2	2+2	2+2	2+2	2+2	
>175m	Barry	(a)(b)(c)	Ballast	2+2	2+2	2+2	2+2	2+2	2+2	—
			Loaded	2+2	2+2	2+2	2+2	2+2	2+2	
	Cardiff	(b)(c)(d)	Ballast	3+2	3+2	3+2	3+2	3+2	3+2	—
			Loaded	3+2	3+2	3+2	3+2	3+2	3+2	
	Newport	(b)(c)(e)	Ballast	2+2	2+2	2+2	2+2	2+2	2+2	—
			Loaded	2+2	2+2	2+2	2+2	2+2	2+2	
(a)	All vessel carrying chemicals in bulk should engage at least one tug in secure mode.									
(b)	All vessels carrying marine pollutants in bulk, should on their first visit engage at least one tug in secure mode.									
(c)	A steady wind speed of 20kts may necessitate the use of an additional tug if not already allocated.									
(d)	Vessels required to back through the compass passage will require 3 tugs.									
(e)	Any vessels over 160m LOA with an underkeel clearance of less than 1.5m will require the use of an additional tug									



## Tug Allocation Table

### Sailing

Length	Port	Notes	Draft	No Aids	Bow Thruster		High lift rudder or stern thruster with a Bow Thruster power of:			Twin Screw or Azipod with suitable Bow Thruster
					Up to 300KW	300KW+	Up to 300KW	300-500KW	1000KW+	
<90m	Barry	(a)(b)(c)	Ballast							—
			Loaded							
	Cardiff	(a)(b)(c)	Ballast							—
			Loaded							
	Newport	(b)(c)(e)	Ballast							—
			Loaded							
90m To 100m	Barry	(a)(b)(c)	Ballast							
			Loaded	1+0	1+0					
	Cardiff	(a)(b)(c)	Ballast							
			Loaded	1+0	1+0					
	Newport	(b)(c)(e)	Ballast							
			Loaded	1+0	1+0					
100m To 110m	Barry	(a)(b)(c)	Ballast	1+0	1+0					
			Loaded	1+0	1+0					
			Loaded	1+0	1+0					
	Newport	(b)(c)(e)	Ballast	1+0	1+0					
			Loaded	1+0	1+0					
			Loaded	1+0	1+0					
110m To 120m	Barry	(a)(b)(c)	Ballast	1+0	1+0					
			Loaded	2+1	1+0					
	Cardiff	(a)(b)(c)	Ballast	1+0	1+0					
			Loaded	2+1	1+0					
	Newport	(b)(c)(e)	Ballast	1+0	1+0					
			Loaded	2+1	1+0					
120m To 130m	Barry	(a)(b)(c)	Ballast	2+1	1+0	1+0				
			Loaded	2+1	1+0	1+0				
	Cardiff	(a)(b)(c)(d)	Ballast	2+1	1+0	1+0				
			Loaded	2+2	2+1	1+1				
	Newport	(b)(c)(e)(g)	Ballast	2+2	1+1	1+0				
			Loaded	2+2	2+1	1+1				
(a)	All vessel carrying chemicals in bulk should engage at least one tug in secure mode.									
(b)	All vessels carrying marine pollutants in bulk, should on their first visit engage at least one tug in secure mode.									
(c)	A steady wind speed of 20Kts may necessitate the use of an additional tug if not already allocated.									
(d)	Vessels required to back through the compass passage will require 3 tugs.									
(e)	Vessels of >15.0m beam when transiting the cut Loaded or in a steady wind speed of 20kts will require the use of a tug.									
(g)	Vessels of over 122m without manoeuvring aids will require a tug when in North Dock									



## Tug Allocation Table

### Sailing

Length	Port	Notes	Draft	No Aids	Bow Thruster		High lift rudder or stern thruster with a Bow Thruster power of:			Twin Screw or Azipod with suitable Bow Thruster
					Up to 300KW	300KW+	Up to 300KW	300-500KW	1000KW+	
130m To 140m	Barry	(a)(b)(c)	Ballast	2+1	1+0	1+0	1+0			—
			Loaded	2+1	2+1	1+0	1+0	1+0	1+0	
	Cardiff	(a)(b)(c)(d)	Ballast	2+1	1+0	1+0	1+0	1+0	1+0	—
			Loaded	2+2	2+1	1+1	1+1	1+1	1+0	
	Newport	(b)(c)	Ballast	2+2	1+1	1+0	1+1	1+0	1+0	—
			Loaded	2+2	2+2	1+1	1+1	1+1	1+0	
140m To 175m	Barry	(a)(b)(c)	Ballast	2+2	2+2	2+2	2+2	2+2	2+1	—
			Loaded	2+2	2+2	2+2	2+2	2+2	2+1	
	Cardiff	(a)(b)(c)(d)	Ballast	2+2	2+2	2+2	2+2	2+2	2+1	—
			Loaded	2+2	2+2	2+2	2+2	2+2	2+2	
	Newport	(b)(c)	Ballast	2+2	2+2	2+2	2+2	2+2	2+2	—
			Loaded	2+2	2+2	2+2	2+2	2+2	2+2	
>175m	Barry	(a)(b)(c)	Ballast	2+2	2+2	2+2	2+2	2+2	2+2	—
			Loaded	2+2	2+2	2+2	2+2	2+2	2+2	
	Cardiff	(a)(b)(c)(d)	Ballast	2+2	2+2	2+2	2+2	2+2	2+2	—
			Loaded	2+2	2+2	2+2	2+2	2+2	2+2	
	Newport	(b)(c)	Ballast	2+2	2+2	2+2	2+2	2+2	2+2	—
			Loaded	2+2	2+2	2+2	2+2	2+2	2+2	
(a)	All vessel carrying chemicals in bulk should engage at least one tug in secure mode.									
(b)	All vessels carrying marine pollutants in bulk, should on their first visit engage at least one tug in secure mode.									
(c)	A steady wind speed of 20kts may necessitate the use of an additional tug if not already allocated.									
(d)	Vessels required to back through the compass passage will require 3 tugs.									



## Tug Allocation Table

### River Usk

Length	Port	Draft	Notes	No Aids		Bow Thruster				High lift rudder or stern thruster with Bow Thruster with power of:						Twin screw or Azipod with suitable Bowthruster
				Docking	Sailing	Up to 300KW		300kW+		Up to 300KW		300-500KW		1000KW+		
						Docking	Sailing	Docking	Sailing	Docking	Sailing	Docking	Sailing	Docking	Sailing	
<90m	Birdport	Ballast	(c)	-	-	-	-	-	-	-	-	-	-	-	-	-
		Loaded	(d)	-	-	-	-	-	-	-	-	-	-	-	-	
	Liberty	Ballast	(c)	-	-	-	-	-	-	-	-	-	-	-	-	-
		Loaded	(c)	-	-	-	-	-	-	-	-	-	-	-	-	
90m-100m	Birdport	Ballast	(c)	-	-	-	-	-	-	-	-	-	-	-	-	-
		Loaded	(d)(e)	1	1	-	-	-	-	-	-	-	-	-	-	
100m-110m		Ballast	(d)	1	1	1	1	-	-	-	-	-	-	-	-	
		Loaded	(d)(e)	1	1	1	1	-	-	-	-	-	-	-	-	
90m-110m	Liberty	Ballast	(c)	-	-	-	-	-	-	-	-	-	-	-	-	-
		Loaded		1	1	1	1	-	-	-	-	-	-	-		
110m-150m	Birdport	Ballast	(c)(d)	2	1	2	1	1	1	-	-	-	-	-	-	-
		Loaded	(e)	2	2	2	2	1	1	-	-	-	-	-	-	
110m-120m	Liberty	Ballast	(a)	1	1	-	-	-	-	-	-	-	-	-	-	-
		Loaded		1	1	1	1	-	-	-	-	-	-	-		
120m-130m	Liberty	Ballast	(a)	2	2	1	1	-	-	-	-	-	-	-	-	-
		Loaded		2	2	2	2	2	2	1	1	1	1	-	-	
130m-150m	Liberty	Ballast	(a)	2	2	2	2	2	2	2	2	2	2	1	1	-
		Loaded		2	2	2	2	2	2	2	2	2	2	2	2	
>150m	Birdport	Ballast	(c)(e)	2	2	2	2	2	2	2	2	2	1	1	1	-
		Loaded		2	2	2	2	2	2	2	2	2	2	2	1	
155m-165m	Liberty	Ballast	(b)	2	2	2	2	2	2	2	2	2	2	2	2	-
		Loaded		2	2	2	2	2	2	2	2	2	2	2		
		Loaded		3		3		3		3		3		2(PST)		
a	Vessels swinging and berthing PST with stern within North limit of berth face															
b	Vessels with a draft more than 8m must berth SST															
c	A sustained wind speed of 20Kn or gusts over 30Kn may require the use of an additional tug.															
d	When more than two movements are planned. The handedness of the vessels, weather and strength of tide may dictate the use of a tug.															
e	Vessels of more than 110m and or 17.5m beam should engage two tugs inwards															

## **Docking and Sailing of Vessels in Conditions of Restricted Visibility**

This procedure details the factors that Cardiff LPS officers, Pilots, and PEC holders must consider when docking or sailing vessels at Newport (including the River Usk berths), Cardiff, and Barry in conditions of restricted visibility.

Following a meeting with marine representatives from the ports, ABP's pilots and tug operators in December 2008 and February 2009, it was acknowledged that a defining distance at each South Wales port was required to ensure that all involved in the movement of vessels within the harbour areas would be given the opportunity to consider a number of defined parameters before making a decision on whether to proceed with a docking or sailing. These distances, known as '**trigger distances**', are defined in the paragraph below.

### **Trigger Distances:**

- **Barry:** The lights on the eastern and western arms of the breakwater viewed from the Pilot Office.
- **Cardiff:** The Inner Wrach buoy viewed from the third floor of Queen Alexandra House.
- **Newport:** The Number 4 buoy viewed from the Pierhead Building, South Lock.
- **Swansea:** The end or inner east pier viewed from the marine control building.
- **Port Talbot:** Dynamic assessment

### **Procedure**

When it becomes apparent that the visibility in a specific port is below the trigger distance, the docking or sailing of such vessel shall be suspended pending consultation with relevant parties.

The Duty LPSO at Cardiff LPS is responsible for initiating consultation with the relevant parties as soon as adverse weather conditions are forecast or experienced.

Those parties consulted should include, but not be limited to, Pilots, PEC holders, Tug Skippers, Ships Masters, Harbour Master and/or his nominated deputy.

This process aims to alert all parties to the relevant conditions, enabling them to decide whether to continue with the movement.

During the consultation, each of the following elements must be considered: -

- The intended route (Passage plan) with abort points.
- Other vessel movements within the harbour or harbour approaches.
- A vessel's ability to maintain a desired track or position.
- The ability to safely pass a heaving and towing line from vessel to tug.
- The characteristics of all the tugs which will be involved in the operation.
- Tug assist methods that might be best used.
- The ability of tugs to manoeuvre safely whilst connecting and disconnecting a tow line.
- The experience level of the Master, Pilot or Tug Skipper.
- Available space on the berth and the proximity of other vessels on adjacent berths.
- The likelihood of the visibility improving in the short term.
- Restrictions/limitations between Lock / Berth or Berth / Lock. E.g., other vessels and container cranes.
- Contingency plans include navigation aid failures and tug disengagement because the Tug Master considers the crew or the tug to be in danger.

**Towage Operations in restricted visibility. Actions considered by the Tug Master.**

If towage operations are to be undertaken with restricted visibility, it is vital for the pilot/master to avoid any situation in which a tug may be overrun. It is understood, therefore that the tug master will ensure that the following factors are discussed during the pilot/master exchange prior to an act of towage commencing:

- Any limitations on the Tug's ability to assist.
- The maximum permissible speed at which any manoeuvre may have to be carried out.
- The necessity to provide information well in advance to the Tug of all engine movements and alterations of course of the towed vessel.
- The necessity to inform the Tug immediately of any changes in the towed vessel's circumstances.
- If a Tug Master believes that his tug is being put at risk or he is not comfortable with the tug's position relative to the vessel.

All tugs involved in the operation must also maintain communications with each other throughout the operation.

During the consultation, each of the following elements must be discussed as a minimum and agreed upon: -

- The method of tow
- Speed – with good advance notice
- Contingency planning: - Pilots must be aware that if a bow tug is made fast when the visibility falls to a distance where the Tug Master deems it unsafe to continue using this towing method, the Master will advise the Pilot that he will let go if he can do so and assist by 'Push / Pull' method on the shoulder. The minimum distance governing this action will be when the Master cannot see the line of the ship.

### **Communication**

It is imperative that communication between the Pilots, Tugs and Lock Controllers is maintained and that contingency planning for restricted visibility is considered a vital part of the passage planning process.

## 5.0 PORT TALBOT TIDAL HARBOUR TOWAGE GUIDELINES

### Minimum Tug Requirements

#### Harbour Inwards:

Vessels below 59999 dwt with an effective bow thruster:	2 tugs (2 X "A")
Up to 59,999 dwt:	3 tugs (1 x "A")
Non Capesize and <244m LOA	3 x "A"
Capesize and > 244m LOA	3 x "A" & 1 x "B"

#### Harbour Inwards PST:

Non-Cape: a fourth tug may be required subject to HM/DHM approval and in consultation with the pilot.

#### Harbour Outwards:

Vessels below 49999 dwt with an effective bow thruster:	No tugs required.
Up to 59,999 dwt	1 x "A"
Non Capesize and <244m LOA	2 x "A"
Capesize and > 244m LOA	2 x "A"

#### Shifting Berths:

Depending upon operational requirements, weather, and time constraints, a vessel shifting berth between North and South berths must engage a minimum of 3 tugs (A-B-A). At Port Talbot Harbour, certain moves along the jetty that require ropes to be let go and moved may require the use of tugs in certain weather conditions that are defined in a standalone procedure.

#### PST Sailings:

Vessels berthed port side alongside should engage a minimum of 3 tugs for departure. (A-B-A). This may be reduced to two tugs (A) for vessels under 200m, subject to approval from the HM/DHM and in consultation with the Pilot.

#### Working bow thrusters

For the purpose of these guidelines, a working bow thruster is defined as a fully operational bow thruster using at least 10% of the main engine's power.

#### Towage in Adverse Weather conditions:

On the pilot's advice, one tug is to be stationed at the Cabenda Buoy 45 minutes before the vessel arrives at the channel entrance to assess sea conditions and liaise with the pilot.



Minimum visibility will be dynamically assessed based upon the vessel and the manoeuvre.

### Tug deployment

Inwards vessels: Tugs to be locked out of Swansea not later than 3 hours before High Water.

Rendezvous position: Tugs to meet vessels at the Cabenda Buoy

One Fwd and one Aft tug to make fast as soon as practicably possible after rendezvous at the Cabenda Buoy

### Requirements for tugs

“A” Class = Twin ASD capable of sustaining a continuous bollard pull of 60 tonnes in the manner that it is employed e.g. Towing over the bow

“B” Class = Twin ASD capable of sustaining a continuous bollard pull of 40 tonnes in the Manner that it is employed e.g. pushing

Port Talbot Harbour Towage Guidelines			
Docking			
Tonnage	Bowthruster	A Class Tug	B Class Tug
<59,999 DWT	Yes	2	
<59,999 DWT	No	2	1
Non Capesize & <244m LOA	No	3	
Capesize & >244m LOA	No	3	1
PST Docking			
Non-Cape: a fourth tug may be required subject to HM/DHM approval and in consultation with the pilot.			
Sailing			
Tonnage	Bowthruster	A Class Tug	B Class Tug
<49,999 DWT	Yes	0	
<59,999 DWT	No	1	
Non Capesize & <244m LOA	No	2	
Capesize & >244m LOA	No	2	
PST Sailings	No	2	1

PST sailings <200m may be reduced to (A+B) on HM/DHM approval and in consultation with the pilot.
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An effective bow thrust is defined as being at least 10% of the main engine power
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'A' Class tugs have a bollard pull of 60t, 'B' Class tugs have a bollard pull of 40t
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## 6.0 Swansea and Port Talbot Old Dock Towage Guidelines

Tug Allocation Table					
Swansea					
Length	Notes	No Aids		With Working Bowthruster (See note b)	
		Docking	Sailing	Docking	Sailing
<90m	(a)	Nil	Nil	Nil	Nil
90m To 125m	(a)	1+1	1+0	Nil	Nil
125m To 150m	(a)	1+2	2+1	1+1	1+0
>150m or beam >22.9	(a)	2+2	2+2	1+1	1+1
(a)	Winds above 20 knots may necessitate the use of an additional tug				
(b)	For the purposes of these guidelines, minimum bow thrust power is defined as at least 10% of main engine power				
Port Talbot Old Dock					
All tug requirements will be advised upon submission of completed notification via Agent Online and are subject to Continuous Dynamic Assessment.					

### Deployment

Deployment of tugs is to be arranged in consultation with the Pilot prior to boarding the vessel.

- Tugs to meet the inward vessel at the Outer Fairway Buoy.
- Stern Tug to make fast at Outer Fairway Buoy.
- Bow tug to make fast after the stern tug has made fast.
- Maximum speed for Azimuth Stern Drive (ASD) Bow to Bow picks up to be 5 knots.

## **Towage in adverse weather conditions**

### **Inwards:**

Wind Speed: 25 – 30 knots on the Marine Control anemometer – [Tug's anemometers to be used as reserve).

*Factors affected by wind speed, direction, and sea state are to be discussed with the pilot prior to carrying out the tug job.*

Minimum visibility of not less than 6 cables

### **Outwards:**

Minimum visibility not less than 3 cables – [Distance guidance: End of Swansea East Pier to be clearly visible from the Marine Control building.]

## **7.0 Towage operations**

This section seeks to offer guidance on towage operations based on nationally accepted standards for towage and local procedures specific to the ABP and Newport Harbour SHA areas of jurisdiction.

Before beginning towage operations, the master or pilot should prepare a comprehensive plan of action that considers all relevant factors, including weather and tidal conditions, the berth operator's requirements, and the vessel's size and configuration.

Pilots should be familiar with the tugs employed in the ABP South Wales and/or Newport Harbour SHA jurisdiction areas.

## **7.1 Pilot / Vessel Master Exchange**

In addition to the standard information passed to the Pilot, it is recommended that the master provide the Pilot with a deck General Arrangement showing the layout and safe working load (SWL) of the mooring fittings, where known, and inform him:

- Which fairleads, chocks, bollards, and strong points can be used for towing?
- The SWL of the above equipment.
- Areas of hull strengthened or suitable for pushing and relevant identification marks employed.
- Using ships' mooring lines as towlines is not recommended (except in an emergency) as the strength may not be in accordance with tug towing force and may therefore limit the tug's performance.
- Any special features (i.e. controllable pitch propellers, thrusters etc).

## **7.2 The Pilot should advise the Master of the following.**

- The tug rendezvous times and positions.
- The number of tugs and the mode of towage.
- The type of tugs to be used and their bollard pull(s);
- If escorting, the maximum towline forces that the tug may generate at escort speeds.
- The maximum planned speed for the passage.
- The method by which the ship's crew should take on board and release the tug's tow line.
- The prohibition on the use of weighted heaving lines.
- That on release, the tug's gear should be lowered back and always under control.
- The areas of the transit posing particular risks with respect to the possible use of the tug.
- The intentions regarding using and positioning the tug(s) for berthing manoeuvres.
- The intentions regarding the use of the tug(s) in an emergency.
- The primary and secondary VHF channels for use in the operation.

## **7.3 Pilot / Tug Master Exchange**

The Pilot and Tug master should, as a minimum, discuss the following issues:

- The SWL of the vessel's equipment used for towing.
- The tug hook-up point, considering the prevailing weather and sea conditions, for escorting operation (if appropriate) and berthing.
- If active escorting, the starting point of the escorted passage.
- The maximum speed of the tug.
- The passage details in their entirety while accompanied by the tug(s), particularly details of any swing manoeuvre, release position and sequence of release.
- The berthing details in their entirety, including tug positioning around the vessel's hull.
- The vessels required position on the berth.
- The emergency use of the ship's anchors.
- Any unusual items regarding the vessel as gleaned from the Master/Pilot Exchange.
- Any failure or reduction in the tug's ability to manoeuvre or deliver the required force.

## **7.4 Communications**

Effective Communications are an important part of safe towage operations in the South Wales and Newport Harbour SHA areas of jurisdiction.

Initial communications between the tugs and the vessel contracting their services on the primary VHF Channel for the individual port should be established on.

Cardiff	VHF 68
Newport / Usk	VHF 71
Barry	VHF 11
Port Talbot	VHF 12
Swansea	VHF 14

Once communications have been established, tugs and vessels should change to the appropriate tug working channel for the port after informing the Local port Services (pier head)

### **Secondary communications (tug working channels)**

Cardiff	VHF 13
Newport / Usk	VHF 74
Barry	VHF 11
Port Talbot	VHF 71
Swansea	VHF 71

Communications between pilots and tug masters should be clear and concise and follow convention.

The pilot (or Master) and tug master should establish a naming convention for the tugs being employed (for example, numbered from Fwd, or tug names if distinct from other tugs being employed so as not to cause confusion.)

The pilot (or Master) and Tug Master should establish how the Pilot will ask for power to be applied, for example, by percentage of available power.

## **7.5 Allocation of tugs**

When tugs have been allocated to a specific towage operation, it may be that the tug skippers prefer to be in certain positions dictated by their turn rotation. While this may be acceptable to the Pilot and pose no additional operational concerns, it may also follow that the Pilot would prefer to utilise the Tugs differently to make the best use of the available tugs. While the Pilot may try and accommodate the tug's turn rotation where possible, the Pilot (or Master) must be free to utilise the tug as he best sees fit to do so.