



ABP South Wales and River Usk Towage Guidelines

January 2020

Document Control

Version	Location	Owner	Issued By	Date
1.0	Electronic	Cardiff LPS	Rod Lewis	01/2017

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 South East Wales towage guidelines, procedure in restricted visibility & Port Talbot towage requirements.	Tom Batchelor	12/02/2019
3.1	Port Talbot table brought in line with written guidelines.	Tom Batchelor	06/12/2019
3.2	Correction to Port Talbot Sailing guidelines	Tom Batchelor	30/01/2020

1.0 Document Control

1.1 Approval and issue

This document has been approved by the Marine Manager South Wales. As a major revision, it has been designated a new issue number.

1.2 Amendment procedure

As this document is reviewed through time it may be deemed necessary to make amendments to its content and procedures. Such amendments will only be made with the prior consent and approval of the Marine Manager, South Wales. This document will be maintained as an electronic document, 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 with regard to 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 will need to be performed outside of these guidelines. Deviation must only occur after consultation with and the sanction of the Marine Manager/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 that wishes to provide towage services in the ABP South Wales and / or Newport Harbour SHA areas of jurisdiction must satisfy the procedure for harbour towage licencing that's purpose is to confirm that the towage operator's operations are compliant with statutory safety management procedures and the requirements of the PMSC.

As part of the above licencing process, the Marine Manager must be provided with the following documents

- A copy of (or electronic link to) the towage providers 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 bollard 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 25 tonnes bollard pull for the "made fast" primary tugs

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

It is however recognised that there is considerable variation in vessel shape condition and manoeuvring capability, for this reason the baseline towage requirement has been further refined so as to consider manoeuvring aids such as thrusters and high lift rudders. First call vessels are obliged to engage the guideline

tug requirement, an assessment can be requested to establish future towage requirement for a given vessel. A database of assessed vessels will be maintained at Cardiff LPS which may further refine towage requirements for regular calling vessels. When assessing any variation from the towage guideline the following will be considered.

- 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 and number
- Type of Main propulsion
- Type of steering system and rudder(s)
- Windage area
- Physical dimensions in relation to Gross Tonnage (GT)
- Any unusual vessel design features
- Any reported defects
- Type of main engine
- Any lock restrictions in force

The following tables have been drawn up from information gained from previous tug use, this approach bringing a more practical approach to tug allocation.

The tables are entered with the vessels length and the port. This will give the number of tugs required.

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

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

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)(d)	Ballast								-	
			Loaded									-
	Cardiff	(a)(b)(d)	Ballast									-
			Loaded									-
	Newport	(b)(d)(f)	Ballast									-
			Loaded									-
90m To 100m	Barry	(a)(b)(d)	Ballast	1+0							-	
			Loaded	1+1								-
	Cardiff	(b)(d)	Ballast	1+0								-
			Loaded	1+1								-
	Newport	(b)(d)(f)	Ballast	1+0								-
			Loaded	1+1								-
100m To 115m	Barry	(a)(b)(d)	Ballast	1+0	1+0						-	
			Loaded	1+1	1+1							-
	Cardiff	(a)(b)(d)	Ballast	1+0	1+0						-	
			Loaded	1+1	1+1							-
	Newport	(b)(c)(d)(f)(g)	Ballast	1+0	1+0						-	
			Loaded	1+1	1+1							-
115m To 130m	Barry	(a)(b)(d)	Ballast	2+2	1+0	1+0	1+0				-	
			Loaded	2+2	1+1	1+1	1+1					-
	Cardiff	(a)(b)(d)	Ballast	2+2	1+0	1+0	1+0				-	
			Loaded	2+2	1+1	1+1	1+1					-
	Newport	(b)(c)(d)(g)	Ballast	2+2	1+0	1+0	1+0				-	
			Loaded	2+2	1+1	1+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)	Vessels of 10m or more in draft will require 3 tugs when manoeuvring in dock											
(d)	A steady wind speed of 25Kn (force 5) may necessitate the use of an additional tug if not already allocated.											
(e)	Vessels required to back through the compass passage will require 3 tugs.											
(f)	Vessels of >15.0m beam when transiting the cut Loaded and/or in windy conditions will require a tug.											
(g)	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)(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	–
	Cardiff	(b)(c)(d)(e)	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)(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	–
150m To 175m	Barry	(a)(b)(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+1	–
	Cardiff	(b)(c)(d)(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	–
	Newport	(b)(c)(d)	Ballast	3+2	3+2	3+2	3+2	3+2	2+2	–
			Loaded	3+2	3+2	3+2	3+2	3+2	2+2	–
>175m	Barry	(a)(b)(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	–
	Cardiff	(b)(c)(d)(e)	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)(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	–
(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)	Vessels of 10m or more in draft will require 3 tugs when manoeuvring in dock									
(d)	A steady wind speed of 25Kn (force 5) may necessitate the use of an additional tug if not already allocated.									
(e)	Vessels required to back through the compass passage will require 3 tugs.									

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)(d)	Ballast								-		
			Loaded									-	
	Cardiff	(b)(d)	Ballast									-	
			Loaded										-
	Newport	(b)(d)(f)	Ballast										-
			Loaded										
90m To 100m	Barry	(a)(b)(d)	Ballast										
			Loaded	1+0	1+0								
	Cardiff	(b)(d)	Ballast										
			Loaded	1+0	1+0								
	Newport	(b)(d)(f)	Ballast										
			Loaded	1+0	1+0								
100m To 110m	Barry	(a)(b)(d)	Ballast	1+0	1+0								
			Loaded	1+0	1+0								
	Cardiff	(a)(b)(d)	Ballast	1+0	1+0								
			Loaded	1+0	1+0								
	Newport	(b)(d)(f)(g)	Ballast	1+0	1+0								
			Loaded	1+0	1+0								
110m To 120m	Barry	(a)(b)(d)	Ballast	1+0	1+0								
			Loaded	2+1	1+0								
	Cardiff	(a)(b)(d)	Ballast	1+0	1+0								
			Loaded	2+1	1+0								
	Newport	(b)(d)(f)(g)	Ballast	1+0	1+0								
			Loaded	2+1	1+0								
120m To 130m	Barry	(a)(b)(d)	Ballast	2+1	1+0	1+0							
			Loaded	2+1	1+0	1+0							
	Cardiff	(a)(b)(d)(e)	Ballast	2+1	1+0	1+0							
			Loaded	2+2	2+1	1+1							
	Newport	(b)(d)(f)(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)	Vessels of 10m or more in draft will require 3 tugs when manoeuvring in dock												
(d)	A steady wind speed of 25Kn (force 5) may necessitate the use of an additional tug if not already allocated.												
(e)	Vessels required to back through the compass passage will require 3 tugs.												
(f)	Vessels of >15.0m beam when transiting the cut Loaded and/or in windy conditions will require 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)(d)	Ballast	2+1	1+0	1+0	1+0			–
			Loaded	2+1	2+1	1+0	1+0	1+0	1+0	–
	Cardiff	(b)(c)(d)(e)	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)(d)	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)(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+1	–
	Cardiff	(a)(b)(d)(e)	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)(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	–
>175m	Barry	(a)(b)(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	–
	Cardiff	(b)(c)(d)(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	–
	Newport	(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	–
(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)	Vessels of 10m or more in draft will require 3 tugs when manoeuvring in dock									
(d)	A steady wind speed of 25Kn (force 5) may necessitate the use of an additional tug if not already allocated.									
(e)	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 Bowthrustrer
				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)	-	-	-	-	-	-	-	-	-	-	-	-	-
90m-100m	Liberty	Ballast	(c)	-	-	-	-	-	-	-	-	-	-	-	-	-
		Loaded	(c)	-	-	-	-	-	-	-	-	-	-	-	-	-
90m-100m	Birdport	Ballast	(c)	-	-	-	-	-	-	-	-	-	-	-	-	-
		Loaded	(d)(e)	1	1	-	-	-	-	-	-	-	-	-	-	-
100m-110m	Birdport	Ballast	(d)	1	1	1	1	-	-	-	-	-	-	-	-	-
		Loaded	(d)(e)	1	1	1	1	-	-	-	-	-	-	-	-	-
90m-110m	Liberty	Ballast	(c)	-	-	-	-	-	-	-	-	-	-	-	-	-
		Loaded	(c)	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	(a)	1	1	1	1	-	-	-	-	-	-	-	-	-
120m-130m	Liberty	Ballast	(a)	2	2	1	1	-	-	-	-	-	-	-	-	-
		Loaded	(a)	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	(a)	2	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	(c)(e)	2	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	(b)	2	2	2	2	2	2	2	2	2	2	2	2	-
		Loaded	(b)	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 must be considered by Cardiff LPS officers, Pilots and PEC holders with regard to 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 East 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 marine control
- **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.

It is the responsibility of the Duty MLC at Cardiff LPS to initiate consultation with the relevant parties as soon as it becomes apparent that 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.

The aim of this process is to alert all parties to the relevant conditions enabling them to make an informed decision on whether or not to continue with the movement.

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

- Passage plan
- 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 line and towing line from vessel to tug.
- The characteristics of all of 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 Master, Pilot or Tug Skipper.
- Available space on the berth with regard to 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, container cranes.
- Contingency plans including 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 in 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 of the 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:-

- The method of tow
- Speed – with good advance notice
- Contingency planning:- Pilots must be aware that if a bow tug is made fast when 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 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.

Working bow thrusters

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

Towage in Adverse Weather conditions:

On the advice of the Pilot, one tug to be stationed at the Cabenda Buoy 45 minutes prior to the vessel's arrival 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
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	
An effective bow thrust is defined as being at least 10% of the main engine power			
'A' Class tugs have a bollard pull of 60t, 'B' Class tugs have a bollard pull of 40t			

6.0 Swansea and Port Talbot Old Dock Towing Guidelines

Tug Allocation Table					
Swansea					
Length	Notes	No Aids		With Working Bowthruuster (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 25 knts may necessitate the use of an additional tug				
(b)	For the purposes of these guidelines minimum bowthrust power is defined as at least 10% of main engine power				
Port Talbot Old Dock					
All tug requirements will be advised on submission of completed notification via Agent On Line and are subject to Continual Dynamic Assessment					

Deployment

Deployment of tugs to be arranged in consultation with 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 to be discussed with pilot prior to carrying out tug job.

Minimum visibility not less than 6 cables – [Distance guidance: Swansea Inner Fairway Buoy to be clearly visible from the Marine Control building.]

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 a comprehensive plan of action should be prepared by the Master / Pilot taking into account all relevant factors including weather / tidal conditions, the berth operator's requirements and the size/ configuration of the vessel.

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

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 this 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:

- 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;
- 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 always under control;
- areas of the transit posing particular risks with respect to the possible use of the tug;
- intentions with regard to use and positioning of the tug(s) for berthing manoeuvres;
- intentions with regard to use of the tug(s) in an emergency;
- 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, taking into account the prevailing weather and sea conditions, for escorting operation (if appropriate) and berthing;
- if active escorting, the start point of the escorted passage;
- the maximum speed of the tug;
- passage details in their entirety while accompanied by the tug(s), particularly details of any swing manoeuvre, release position and sequence of release;
- berthing details in their entirety, including tug positioning around the vessel's hull
- and the vessels required position on the berth;
- emergency use of ships anchors;
- any unusual items regarding the particular vessel as gleaned from the Master/Pilot exchange;
- any failure or reduction in the tug's ability to manoeuvre or deliver

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

Cardiff	VHF 68
Newport / Usk	VHF 71
Barry	VHF11
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	VHF11
Port Talbot	VHF 71
Swansea	VHF 71

Communications between Pilots and Tug masters should be clear, concise and follow convention

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

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

7.5 Allocation of tugs

When tugs have been allocated to a specific towage operation, it may be that the tugs would 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 in a different way so as to make best use of the available tugs. While the Pilot may try and accommodate the tugs turn rotation where possible, the Pilot (or Master) must be free to utilise the tugs as he best sees fit to do so.