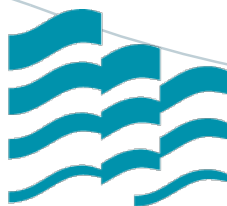


**PORTO DE  
SETÚBAL**



**Pilotage Service Harbor Setúbal**

**TECHNYCAL STANDARDS**



**APSS**

Administração dos Portos  
de Setúbal e Sesimbra, SA



## Foreword

These procedures represent a guideline for safe navigation and maneuvers in the Porto of Setubal. They don't limit across the ship board action of Captain and Pilot which, inserted in the dynamic environment where the ship moves, when faced with unforeseen situations, may decide differently for the sake of safety and a good port operation.

The ships draft, lengths and restrictions may officially be changed without these rules to be corrected on the spot they are exposed; therefore, to ships under close limits the contact with the competent authority is required.

## BAR AND NORTH CHANNEL

Ship draught at BAR – up to 12 m

Ship draught reference to ships aimed to SHIPYARD, entering or leaving the BAR- 7.50 m.

The draught at BAR and NORTH CHANNEL, until RO-RO berth, is 10, 30 m plus the tide height to a maximum of 12 m.

The draught anytime is 10, 5 m.

Upstream of RO-RO berth, see rules of the respective terminals

These values are valid for swell below 1 m and downwind 10 knots.

## General information

Vessels over 220 meters long to SHIPYARD MITRENA (entering or leaving,) without any special auxiliary means for maneuver, in good order, and all those with engine or steering disabilities, should be assisted, at least, by one tugboat on path.

When wind speed exceeds 20 knots, the nominated Pilot, according with the captain of ship to be piloted, decide on the viability of maneuvers to be executed specially regarding large surface ships sail.

It's possible the Pilot assistance off the ship, on Pilotage Regulations (Decree nº 48, March 2, 2002), Whenever weather or see conditions don't permit a safe Pilot embark within the set limits, The service can be provided by an out board assistance, with the Captain agreement and the fulfill of safety requirements of Port Regulations.

In certain scenarios, When Master and Pilot deem to be safe, the embark/disembark can be carried out at OUTÃO area.

Is a standardized procedure to dock with current on ship bow, other situations are assessed on a case by case basis.

Ship crossings are avoided between nº 2 and nº 4 beacons at bar channel, at SAPEC channel and ALSTOM channel.

## SOUTH CHANNEL

Is a waterway the South Channel space between the buoys 8/10 and 10/12 towards berths TANQUISADO, ECOOIL, TERMITRENA and SHIPYARD, taking in account the minimum depth.

Vessels over 60.000 tons Deadweight, coming from repairs on SHIPYARD, should not leave with ebb spring tide (high water over 3 meters).

Ships between 60.000 and 100.000 DW can leave at any time of neap tides.

Ships over 100.000 DW can leave in ebb neap tides if expected to pass OUTÃO until 1,5 hours after high tide.

Exit and entrance movements on SHIPYARD, is up to the Pilot performing the maneuver, according to the captain, to decide on the need anchor at South Anchorage to prepare and finish the maneuver safely.

## SECIL TERMINAL

The moorings should be close to high water or low water time.

Quay West	
Length of quay	105 m
Vessel length maximum	200 m
Vessel draught reference	9,5 m

Quay East	
Length of quay	60 m
Length of quay and dolphin	121 m
Vessel length reference	140 m
Vessel draught reference	8 m

## MULTIPURPOSE TERMINAL

Vessel length reference	230 m
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<b>TMS 1</b> - Between bollards 1 a 39	825 m
Operational draught (at 3 different spaces)	8,8 m
	9,8 m
	10 m

Upper draught is possible according with low tide height on days alongside.  
At space about bollards 17 to 28 is possible to berth ships up to 12 meters draught, by using retractors.

<b>TMS 2</b> - Between bollards 39 to 63	723 m
Operational draught	12 m

## RO-RO/AUTO EUROPA TERMINAL

### QUAY 10

Length of quay	366 m
Length of quay and West dolphin	405 m
Vessel draught reference	10.0 m

### QUAY 11 – RO-RO RAMP

Length of quay	145 m
Vessel draught reference	10, 0 m
Vessel length reference	160 m

### URALADA TERMINAL

Distance between the two dolphins	30 m
Length of quay	40 m
Vessel length reference	100 m
Maximum draught	5, 5 m
Maximum Deadweight	5000 Tons

To know the maximum draught we must add 4, 5m to the height of low tide until the maximum of 5, 5 m.

### PRAIAS DO SADO (ex-PIRITES) TERMINAL

Length of quay	125 m
Vessel length reference	200 m
Draught according height of tide, until	10 m

The draught each day depends of chart datum on the turning and alongside basins.

### SAPEC TERMINAL - DRY BULK

Length of quay	112 m
Distance to dolphin	70 m
Vessel length reference	200 m
Vessel draught reference with IMO cargo	9, 5 m
Vessel draught reference, others	10 m
The anytime draught with IMO cargo	7, 2 m
The anytime draught, others	7, 7 m

O calado a qualquer hora é 7,2 m para navios com carga IMO e 7,7 m para outros.

### SAPEC TERMINAL - LIQUID BULK

Length between the dolphins aches	35 m
Length of berth	77 m
Vessel length reference	200 m
Vessel draught reference with IMO cargo	9, 5 m
Vessel draught reference, others	10 m
The anytime draught with IMO cargo	7, 2 m

The anytime draught, others 7, 7 m

### ALLSTOM TERMINAL

Length of quay 91 m  
Vessel draught reference 7 m  
Vessel length reference 110 m

Vessels over 90 meters are restricted to proceed alongside on daylight time, but can sail anytime.

### TANQUISADO TERMINAL

Length of quay and dolphins 463 m  
Vessel length reference 200 m  
Vessel draught maximum reference 9, 5 m

We know the draft adding to 6, 3 m the height of tide  
The anytime draft 6, 4 m

Berth maneuvers are performed close to high or low water time.  
Vessel length over 110 m only goes to berth daylight time.

Sailing maneuvers are performed close to high or low water, or during ebb tide in case of the previous high water height was 3 m or less.

Nighttime sailing is restricted to the draught calculated adding 4, 8 m to the height of tide.

### ECO-OIL TERMINAL

Length of quay and dolphins 463 m  
Vessel draught reference, high water maneuver 7 m  
Vessel draught reference, low water maneuver 5, 5 m  
Vessel draught reference alongside 7, 5 m

Maneuvers are performed close to high or low water  
No night time berthing

Daylight time berthing, Vessel length

• High Water (HW)	No restrictions
• Low Water (LW) $\geq 0, 9$ m	255 m
• Low Water (LW) $< 0, 9$ m	250 m

Daylight time unberthing, Vessel length

• HW	No restrictions
• LW $\geq 0, 9$ m	255 m
• LW $< 0, 9$ m	250 m

Night time unberthing, vessel length  
Restricted to HW 255 m

## TERMITRENA TERMINAL

Under evaluation

## SHIPYARD LISNAVE – MITRENA

Piers and Dry Docks

- 4 Piers, fingers type North/South oriented
- 3 Dry docks to PANAMAX vessels
- 3 Dry docks to VLCC and ULCC vessels

The maneuvers are performed close to HW or LW time.

Wind limit reference for maneuvering high sail area ships is 11 knots.

The maneuvers are performed day and night

- |                                     |                 |
|-------------------------------------|-----------------|
| • Daylight, vessel length reference | No restrictions |
| • Night, vessel length reference    | 280 m           |

## AÇO QUAY

Length of quay	100 m
Vessel length reference	120 m
Vessel draught reference	NA

## SETÚBAL TUGBOAT USE

DWT(tones)	Ship/cargo type		S/HPr	C/HPr	C/HPr e LPo	Remarks
<4.000	IMO CARGO	AC	PP	P	P	<b>Compulsory</b>
		AV	P			
		DC	PP	P	P	
		DV	P			
	Other	Berthing/leaving	P			L> 90 D> 6 m
4.001 / 8.000	IMO CARGO	AC	pp	P	P	<b>Compulsory</b>
		AV	pp	P		
		DC	pp	P	P	
		DV	P			
	Other	Berthing/leaving	P			
8.001 / 15.000	IMO CARGO	AC	GG	GP	G	<b>Compulsory</b>
		AV	PP	G	P	
		DC	GG	GP	PP	
		DV	pp	P	P	
	Other	AC	GG	G		
		AV	PP	P		
		DC	GG	G		
		DV	P	P		
15.001/25.000	IMO CARGO	AC	GGP	GG	G	<b>Compulsory</b>
		AV	GG	G	G	
		DC	GG	GP	GP	
		DV	GG	GP	G	
	Other	AC	GGP	GG	G	
		AV	GG	GP	G	
		DC	GG	GP	G	
		DV	GG	GP	G	
>25.000	IMO CARGO	AC	GGG	GGP	GG	<b>Compulsory</b>
		AV	GG	GG	G	
		DC	GG	GG	GG	
		DV	GG	GG	G	
	Other	AC	GGG	GG	G	
		AV	GG	GP	G	
		DC	GG	GP	G	
		DV	GG	G	G	

**G** - Tugboat  $\geq$  25 Tons bollard pull

**P** - Tugboat  $<$  25 Tons bollard pull

**S/HP<sub>r</sub>** - No Bowthrusters  
**C/HP<sub>r</sub>** - With Bowthrusters  
**LPO** - With stern thrusters

**AC** - Berthing loaded  
**AV** - Berthing empty  
**DC** - Leaving loaded  
**DV** - Leaving empty

**D** - Vessel Draught

**L** - Vessel Length

**DWT** – Deadweight

Assumptions for drawing the table:

- Ship maneuvering in good standing;
- Favorable weather conditions;
- Normal tide conditions/berthing;
- All aid maneuvering in good standing;
- Bowthrusters e Sternthrusters sufficient immersed.

Tugs and ships draught on port entrance channel, aimed to shipyard LISNAVE – MITRENA

DWT (tons)	Nº tugs	Draft (m)
Up to 50.000	-	6,0
50.001 / 90.000	1	7,0
90.001 / 130.000	2	7,0
130.001 / 170.000	3	7,5
> 170.000	4	7,5

This table should not be considered as a rigid rule to be followed in every case. The last decision about how many tugs to be used shall be the result of captain and Pilot talking, excluding IMO cargo ships over 70 meters length, for which the table contents are required (the scope of Port Administration tasks, article 2º Decree nº46 March 2, 2002).