PO.PA.COR.005

Procedure for

USERS IN THE VTS AREA OF THE AÇU PORT

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1- OBJECTIVE:

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The objective of this document is to provide information to all users of the VTS area, with regards to any action that interferes or may interfere on the maritime traffic under the responsibility of the VTS provider, on behalf of the Açu Port VTS Center, contributing to the efficient achievement of the service purpose provided by the Port of Açu, by means of:

- Providing timely and relevant information about factors that may influence and create unsafe situations during vessel movements;

- Traffic monitoring and management; and
- The prompt response to the development of unsafe situations for maritime traffic.

According to the world best practices, observed amongst mentors of IALA and the assessment of the Antwerp Port Authority, as well as instructions from the Representative of the Maritime Authority for VTS aspects (CAMR), the interactions of the navigation assistance should focus to the opportunity fundamentals, in special, during the approaching maneuvering to berth, departure after unberthing, and the berthing/unberthing itself, where the Master's full attention is related to the situation of the engines, (of the vessel, and when there are, tug boats), human interactions with the vessel and externals (including the terminal), weather conditions that may impact the maneuverability of the vessel and, when in use, pilots and tug boats, avoiding overlapping information, which could be not assertive for the moment, causing unnecessary noise.

2 - APPLICATION:

For all users (vessels and terminals) of the VTS area of the Port of Açu. The private use terminal in operation at the Açu Port and the participant vessels sailing within the VTS Area must know the service of vessel traffic, it's function and purpose, and to know the role they must fulfill to keep an active monitoring scheme.

3 - REFERENCES:

- > AÇU PORT REGULATION 2^a. Edição, Revisão 01 12/2019.
- > Maritime Authority Standards for Vessel Traffic Service (VTS) NORMAM-602/ DHN.
- > Maritime Authority Standards for Naval Inspection Activities NORMAM-301/ DPC.
- Maritime Authority Standards for the Traffic and Stay of Vessels in Brazilian Jurisdictional Waters -NORMAM-204/ DPC.
- Maritime Authority Standards for Administrative Inquiries on Accidents and Facts of Navigation (IAFN) and for the Safety Investigation of Maritime Accidents and Incidents (ISAIM) - NORMAM-302/ DPC.
- > Maritime Authority Standards for the Pilotage Service NORMAM-311/DPC
- > **IMO SRS**: IMO Standard Ship Reporting System.
- > NAUTICAL EMERGENCY PLAN FOR THE PORT OF AÇU PEN PO.PA.COR.006.03
- > IMO Resolution A.1158(32) Guidelines for VTS;





4 - DEFINITIONS AND ABBREVIATIONS:

Port Administration: is the enterprise Porto do Açu Operações SA (VTS Provider)

AIS *(Automatic Identification System)*: A ship identification system that, within the scope of VTS, is intended to contribute to vessel identification, target tracking, and simplification of information exchange by reducing radiotelephony contacts and providing basic navigation data and other information of interest.

VTS Area: Formally declared area in which the VTS provider is authorized to provide vessel traffic service. It can be divided into sub-areas or sectors, limited to as few as possible, so as not to make it difficult for the operator to understand the overall traffic picture.

Competent Authority: Government organization legally responsible for the VTS. In Brazil, this is the Maritime Authority's attribution.

BPAE: Emergency Response Readiness Base.

Qualification Certificate: a document issued by the CAMR that proves that a person has taken a VTS course at an accredited teaching institution and has completed the on-the-job training process and is able to perform his or her tasks at a specific VTS Center.

VTS Center: it is where the VTS operates.

CORE: Center for Operations and Emergency Response, a management structure composed of the Navigation, Property Security, and QHSE managements, with the purpose of managing the daily operational routines of these areas, as well as managing the emergency situations that may occur in the port area.

Participating Vessel: vessel equipped with AIS A, bound for channels T1 and T2 and that is mandatorily submitted to the monitoring by the Port of Açu VTS Center.

EVAM: Aeromedical Evacuation.

FPIS/PFSO: Port Facility Security Officer.

VTS Manager: the person formally designated by the VTS Provider and responsible for the management, operation, maintenance, and safe and effective provision of the service within the VTS Area.

Peak Hours (HP): time of day with the highest volume of vessel traffic.

IMO: International Maritime Organization.

IMO SRS: IMO Standard Ship Reporting System.

impracticality: situation in which weather conditions, sea state, accidents or facts of navigation or technical deficiencies imply in unacceptable risk to the safety of navigation, discouraging the performance of pilotage tasks, the vessels traffic and/or the boarding/landing of the pilot.

Peak Instants: eventual accumulation of traffic in a short period of time, which can cause a momentary overload of work for the VTSO.

Meteoromarinha: bulletin of weather forecast and conditions for the Brazilian marine area.

MMSI: *Maritime Mobile Service Identity.* 9-digit number that identifies a radio station.

NPCP-CPM: Standards and Procedures of the Port Authority of Macaé.

PAM: Mutual Assistance Plan that contemplates joint action between Terminals T1 and T2 at the Port of Açu in emergency response.

PEN: Nautical Emergency Plan.

PILOT BOARDING GROUND: It is the point established in geographic coordinates in the ZP, where the Pilots' boarding/landing is performed at the beginning or end of a Piloting task.

PROCEDURE FOR USERS IN THE VTS AREA OF THE AÇU PORT





PMIS: Port Management Information System. It is a platform connected to the main Brazilian value chains, with integrated solutions for logistical bottlenecks, which receives important information from the Port of Açu VTS Center. The path is marked by five core values tied to a state-of-the-art infrastructure: Integrity, Efficiency, Safety and Security, Collaboration, and Sustainability.

Notification point: points located in the area under the responsibility of the Port of Açu VTS Center. The mariner should inform the VTS Center when he crosses the vicinity of one of these points, both on arrival and departure.

Operational Position: workstation inside the VTS manned by the VTSO. An operational position has the necessary resources to keep up with maritime traffic.

Procedure for users in the VTS Area of the Açu Port – "Procedure for Mariners in the VTS Area of the Açu Port" duly approved by the local Maritime Authority Agency, in accordance with the IALA Guideline G1141, in accordance with NORMAM 26/DHN.

VTS Provider: Organization or entity responsible for the deployment, management, operation, and coordination of VTS activities, their interaction with users, and the safe and effective provision of the service. In Brazil, such attributions are of the Port Authorities or Operators of Private Use Terminals (TUP) that implement the service, by means of authorization from the Competent Authority.

QHSE: Quality, Health, Safety and Environment Management.

RIPEAM: International Regulations for Preventing Collisions at Sea.

SOP (Standard Operating Procedures): these are standard procedures, based on the different situations that may occur during service provision, which will be adopted by the personnel working in the VTS Center operation. They should be comprehensive, clearly defined, up-to-date, and contained in a ready-to-use manual available to service personnel in the VTS.

VTSO (Vessel Traffic Service Operator) - a person qualified in an accredited educational institution and formally appointed to act as a service operator in a VTS Center.

VTSS (Vessel Traffic Service Supervisor) - a person qualified in an accredited educational institution and formally appointed to act as supervisor of the service in a VTS Center.

VTMIS (Vessel Traffic Management and Information System) - extension of VTS, in the form of an Integrated Maritime Surveillance System, which allows allied services and other interested agencies to share VTS data directly to increase the effectiveness of port operations or maritime activity as a whole.

VHF: Very High Frequency.

QHSE: Quality, Health, Environment and Safety at Work.

Track Number: tracking number of a contact, generated by the radar system. Mandatory in case of AIS failure.

TUP: Private Use Terminals

Users of the VTS Area at the Açu Port: All persons, directly or indirectly related to navigation performed activities within the VTS area, established by the competent authority, including, besides the mariners, the Terminals within the mentioned area.

ZP: Pilot zone.

PROCEDURE FOR USERS IN THE VTS AREA OF THE AÇU PORT

PO.PA.COR.005



5 - PROCESS DESCRIPTION:



5.2. Navigation within the VTS area of the Port of Acu

5.3. Pilotage

5.4. Tugboats

5.5. Communication Channel

5.1 - NOTICE TO THE USERS IN THE VTS AREA OF THE AÇU PORT:

5.1.1 - PARTICIPATING VESSELS

These are all vessels that can interact with the VTS. The participation of these vessels can be mandatory or passive. On mandatory participation the mariner must observe the Procedures for Users in the VTS Area.

All vessels integrated to SISTRAM, other vessels with AIS A and all vessels with AIS B carrying out commercial passenger transportation, including tourist transportation, in the VTS area will be required to participate. For tugboats and pushers participation is mandatory when in service, for any length of tow or convoy.

Passive participation is for other vessels with AIS B and other vessels that have VHF communication, such as recreational and fishing vessels, which, although monitored by VTS, through AIS or radar, only occasionally participate in the exchange of communications with the VTS Operators. In passive participation, the mariner is recommended to adopt the Procedures for Users in the VTS Area of Açu Port when transiting waterways used by vessels with mandatory participation, to avoid undesirable traffic conflicts.

The local representative of the Maritime Authority will be immediately informed about the vessels that fail to comply with any item stated on legal documents, in special, **NORMAM 602/DHN** and Port Regulation of Açu Port so the necessary administrative measures can be taken to investigate the irregularity and/or deviation.

If any items of this procedure are not followed, the vessel will be subject to notification/warning/clarification by the VTS Center of the Port of Açu.

All users of the Açu Port are required to know the emergency contacts and service protocols of the terminals where it operates. It should also know the emergency procedures and contacts of the Port of Açu VTS Center during its stay in the VTS Area of the Port of Açu.

The emergency contacts can be found in the links below:

- T1: <u>https://www.ferroport.com.br/nossonegocio/terminalportuario/</u>
- > T2: <u>https://portodoacu.com.br/administracao-portuaria/informacoes-aos-usuarios/</u>



Vessels at berth or anchorage must maintain constant monitoring of meteoceanographic conditions and their influence on the vessel, including anchoring and berthing systems, taking the necessary mitigating actions as the scenario indicates, including leaving the anchorage or mooring berth if the situation so requires. The VTS Center of the Port of Açu should be informed whenever a risk to the vessel is identified and, if deemed necessary, it will issue pertinent instructions to users, aiming at maintaining the safety of navigation and protection of port installations.

5.1.2 - VESSEL TRAFFIC SERVICE (VTS):

The Port of Açu VTS Center was licensed by Ordinance No. 208/DHN, dated December 3, 2015, of the Directorate of Hydrography and Navigation and published in the Official Gazette of the Union No. 236, Section 1, page 5, on December 10, 2015.

The mission of the Port of Açu VTS Center is to provide an active vessel traffic monitoring structure capable of interacting with vessel traffic and responding to developing situations within a VTS area to improve navigation safety and efficiency, contribute to the safety of life at sea, and support environmental protection.

The safe and effective provision of the VTS service contributes to increasing the safety of navigation, human life at sea, and to preventing water pollution. It also has a positive impact on the efficiency of port entry and exit maneuvers, contributes to the preservation of the environment, and supports the port security measures implemented by the Port Administration.

The VTS Center at the Port of Açu is available 24 hours a day, 7 days a week, in Portuguese and English, on demand, providing timely and relevant information about the factors that may influence vessel movements; monitoring and managing ship and vessel traffic; and responding to the development of unsafe situations for maritime traffic, which may include the provision of assistance for emergency response or support to emergency services, as well as assistance to vessels, as provided for in the new IMO resolution A.1158(32), approved by the 32nd Assembly on December 15, 2021.

Additional information from the VTS Center of Port of Açu:

MMSI 007101269

CODE - ZXI36

5.1.3 - MONITORING AREA OF THE VTS CENTER OF THE PORT OF AÇU:

The monitoring area of the VTS Center at Port of Açu is delimited by the polygon composed of the points listed below in addition to the internal channels and evolution and maneuvering basins.

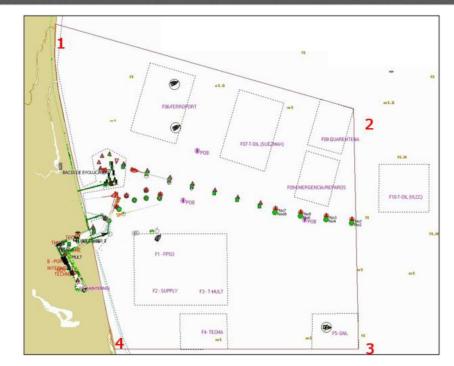
> Mandatory VTS area for participating vessels

POINT	LATITUDE	LONGITUDE
1	21° 41,847' S	041° 01,442' W
2	21° 45,437' S	040° 47,488' W
3	21° 55,623' S	040° 47,488' W
4	21° 55,623' S	040° 58,740' W

PROCEDURE FOR USERS IN THE VTS AREA OF THE AÇU PORT

PO.PA.COR.005

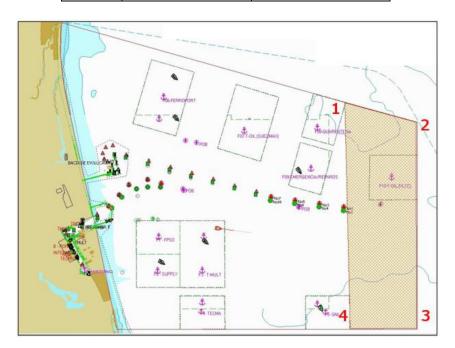




> Adjacent VTS area voluntarily adhered to by the mariner:

The adjacent VTS monitoring area at the Port of Açu exceeds 12 nautical miles from the coast, above the territorial sea, in which the VTS keeps active monitoring of the traffic, increasing the navigation safety layer in this region that is of interest to the Port of Açu. However, this area is voluntary for the mariner, and he is only recommended to adopt the procedures in this document.

POINT	LATITUDE	LONGITUDE
1	21° 45,437' S	040° 47,488' W
2	21° 46,320' S	040° 44,220' W
3	21° 55,620' S	040° 44,220' W
4	21° 55,623' S	040° 47,488' W





> Contacts with the Port of Açu VTS Center:

VHF radio: CH 10 and 16 Tel: +55 22 2133 1223 / +55 22 9-8119-3700 e-mail: acu.vts@portodoacu.com.br

5.1.4 - COMMUNICATION EQUIPMENT:

Every active vessel, hired by the users of the Açu Port complex (Terminals 1 and 2) must present its navigation, steering, and communications equipment, including AIS, fully operational to navigate in the VTS Area. The equipment must be kept operational during the entire stay and transit of the vessel Any malfunctioning noticed must be reported immediately to the VTS Center.

The Terminals must keep active listening and are also in charge for keeping direct communications with the vessels under their responsibility, as well as convening the vessels for berthing, instructing the mariners to rely to the VTS Center for traffic condition updates.

All VHF radio communications, within the VTS area, must be objective, concise and in accordance with standard radio communication procedures from IMO Standard Marine Communication Phrases (SMCP - Res. IMO A. 918(22)).

When entering or leaving the VTS Area; and when anchoring inside and outside the harbor boundaries, all vessels must garrison VHF channel 16.

When berthing, unberthing and/or shifting positions, all vessels, including the TUP, must garrison VHF channels 10 and 16.

The Port of Açu Vessel Traffic Service call sign is **"CENTRO VTS PORTO DO AÇU" or "AÇU VTS".** This name must be used by all participants.

In the VTS area, the AIS system must be operational, correctly configured, and permanently sending vessel information. Careful configuration of the AIS transponder position in relation to the vessel's dimensions (dimensions A, B, C, and D) is recommended, thus allowing the correct tracking of maneuvers by the VTS Center's AIS station.

The VTS Center of the Port of Açu must be informed immediately of the unavailability of the communication equipment by all alternative means available, including mobile telephony.

Station	VHF
Station	Channel
Call and Emergency	16
Açu VTS Center	10
Pilotage (Monitored by Atalaia ZP-15)	12
Channel for maneuvers in Port with tugs	13

Main VHF Stations at Port of Açu:

5.1.5 - NAVIGATION IN THE VTS AREA OF THE PORT OF AÇU (NOTIFICATION POINT):

The mariner that demands in the VTS monitoring area of the Port of Açu must contact the VTS Center informing his maneuver intentions through the VHF 10 respecting a minimum notice of 15 minutes.

The VTS Center does not manage the vessels schedules, being the responsibility of the terminal, the communication with the vessel with instructions about the laytime.

The VTS Center assigns the anchorage position so the vessel can wait for the availability of the terminal.



The VTS Center must be informed via VHF 10 every time the vessels cross the notification points, specified below, within the VTS area.

POINT	NOTIFICATION	LATITUDE	LONGITUDE
A	NORTH boundary of the VTS area	21° 43,87' S	040° 53,73' W
В	EAST boundary of the VTS area	21° 51,60' S	040° 47,48' W
С	SOUTH boundary of the VTS area	21° 55,62' S	040° 51,55' W
D*	Pilot boarding/landing point to T1 (outside the VTS area)	21° 50,34' S	040° 46,72' W
Е	Pilot (alternate) boarding/landing point to T1	21° 47,17' S	040° 55,43' W
F	Pilot boarding/landing point to T2	21° 49,37' S	040° 55,52' W

* Although point D is outside the area of compulsory notification, in view of the relevance of the information for the safety of navigation, it is recommended that the boarding and landing of the pilot be informed.

5.1.6 - ANCHORAGE AREAS:

The Port of Açu has eleven (11) anchorage areas, which will be indicated/designated, according to the type of service provided to users of the VTS area of the Açu Port, according to the following distribution:

Description	Latitude (S)	Longitude (W)
	21°50,750'	040°57,810'
Anchorage Area #1	21°50,750'	040°55,700'
for T2 platforms and FPSO vessels	21°52,250'	040°55,700'
	21°52,250'	040°57,810'
	21°52,250'	040°57,810'
Apphorogo Aroo #2 for T2"SUPPLY" vessels	21°52,250'	040°55,700'
Anchorage Area #2 for T2"SUPPLY" vessels	21°53,750'	040°55,700'
	21°53,750'	040°57,810'
	21°50,750'	040°55,700'
Anchorage Area #3	21°50,750'	040°53,530'
for T2 "T-MULT" terminal ships	21°53,750'	040°53,530'
	21°53,750'	040°55,700'
	21°54,123'	040°55,700'
Anchorage Area #4	21°54,123'	040°53,530'
for T2 "TECMA" terminal tankers	21°55,623'	040°53,530'
	21°55,623'	040°55,700'
	21°53,371'	040°49,816'
Apphorage Area #5 for T2 NC vessels	21°53,365'	040°51,947'
Anchorage Area #5 for T2 LNG vessels	21°51,867'	040°51,946'
	21°51,874'	040°49,807'
	21°43,506'	040°57,069'
Anchorage Area #6	21°44,070'	040°55,011'
for ships in ballast (up to "CAPESIZE") from the T1 T- ORE terminal	21°46,943'	040°55,906'
UKE leitiilidi	21°46,371'	040°57,973'
Anabarana Araa #7	21°44,634'	040°52,970'
Anchorage Area #7	21°45,199'	040°50,905'
for oil tankers (up to "SUEZMAX") from the T1 T-OIL terminal	21°48,075'	040°51,817'
lenninai	21°47,506'	040°53,875'

PROCEDURE FOR USERS IN THE VTS AREA OF THE AÇU PORT

PO.PA.COR.005



Description	Latitude (S)	Longitude (W)
	21°45,032'	040°49,241'
Anchorage Area #8 for ships in quarantine or awaiting	21°45,437'	040°47,689'
release from ANVISA of T1/T2	21°47,373'	040°48,256'
	21°46,974'	040°49,822'
	21°47,234'	040°49,883'
Anchorage area #9 for emergency situations and/or	21°47,640'	040°48,330'
major repairs of the T1/T2	21°49,574'	040°48,896'
	21°49,165'	040°50,461'
	21°47,810'	040°46,530'
Anchorage Area #10	21°47,810'	040°44,219'
for oil tankers (up to "VLCC") from T1terminal T-OIL	21°49,810'	040°44,219'
	21°49,810'	040°46,530'
Anchorage Area #11* for ships from terminal T2: (center of circle)	21° 52,960'	041° 00,322'

5.1.7 - AIDS TO NAVIGATION AT THE PORT OF AÇU:

TERMINAL 1			
Buoy	Col or	Latitude (S)	Longitude (W)
T1-01	ш	21° 50,13	040° 47,78
T1-02	V	21° 50,28	040° 47,80
T1-03	ш	21° 49,98	040° 48,96
T1-04	V	21° 50,13	040° 48,98
T1-05	Е	21° 49,83	040° 50,13
T1-06	V	21° 49,98	040° 50,15
T1-07	Е	21° 49,68	040° 51,29
T1-08	V	21° 49,83	040° 51,33
T1-09	Е	21° 49,50	040° 51,99
T1-10	V	21° 49,65	040° 52,04
T1-11	Е	21° 49,23	040° 53,04
T1-12	V	21° 49,37	040° 53,08
T1-13	ш	21° 48,95	040° 54,08
T1-14	V	21° 49,10	040° 54,12

Access channel markings for Terminals 1 and 2.

TERMINAL 1			
Buoy	Col or	Latitude (S)	Longitude (W)
T1-15	Е	21° 48,68	040° 55,12
T1-16	V	21° 48,83	040° 55,16
T1-17	ш	21° 48,41	040° 56,16
T1-18	V	21° 48,55	040° 56,21
T1-19	Е	21° 48,13	040° 57,20
T1-20	V	21° 48,28	040° 57,25
T1-21	Е	21° 47,85	040° 58,28
T1-22	V	21° 47,99	040° 58,32
T1-23	Е	21° 47,43	040° 58,95
T1-24	V	21° 47,85	040° 58,88
T1-25	Е	21° 47,51	040° 59,29
T1-27	Е	21° 47,79	040° 59,43
T1-29	Е	21° 48,03	040° 59,36
T1-31	Е	21° 48,15	040° 59,20

TERMINAL 2				
Buoy	Col or	Latitude (S)	Longitude (W)	Bu
T2-01	Е	21° 49,08	040° 56,60	T2
T2-02	V	21° 49,24	040° 56,65	T2
T2-03	E	21° 48,91	040° 57,27	T2
T2-04	V	21° 49,24	040° 57,26	T2
T2-05	E	21° 49,14	040° 58,17	T2
T2-06	V	21° 49,32	040° 57,80	T2
T2-07	E	21° 49,59	040° 58,63	T2
T2-08	V	21° 49,70	040° 58,51	T2
T2-09	E	21° 50,09	040° 59,14	T2
T2-10	V	21° 50,18	040° 58,99	T2

	TERMINAL 2			
Buoy	Col or	Latitude (S)	Longitude (W)	
T2-11	Е	21° 50,53	040° 59,70	
T2-12	V	21° 50,72	040° 59,68	
T2-13	Е	21° 51,19	041° 01,11	
T2-14	V	21° 51,10	041° 00,41	
T2-15	ш	21° 51,41	041° 01,21	
T2-16	V	21° 51,26	041° 00,82	
T2-17	ш	21° 52,39	041° 00,66	
T2-18	V	21° 51,49	041° 01,09	
T2-19	E	21° 52,76	041° 00,42	
T2-20	V	21° 51,65	041° 00,99	

To fully guarantee the safety of navigation, the Access Channels established above must be used from the first pair of buoys.



5.2 - NAVIGATION WITHIN THE VTS AREA OF THE PORT OF AÇU:

5.2.1 - ACCESS TO THE T1 AND T2 TERMINALS:

The vessel can only access terminals T1 and T2 with the authorization of the Port of Açu VTS Center, in compliance with the situations below:

- Terminal Readiness (TUP) confirmed;
- > Wharf availability confirmed; and
- Safe access for navigation.

On those occasions when the VTS assesses that the number of vessels in the channel may degrade the conditions of navigation safety and traffic order, access to the terminals will not be allowed.

The vessel is not allowed to do the following, inside of the buoyed channel:

- > Perform any kind of test on the vessel;
- > Stay on DP or reduce speed to wait for wharf availability; and
- > Anchor. Anchoring inside the buoy channel will only be allowed on emergency situations.

The emergencies or unforeseen events, with potential for the development of unsafe situations for maritime traffic, must be communicated in a timely manner to the VTS Center, so that the VTSO adopts the necessary measures for the safety of navigation and protection of port facilities.

5.2.2 - MANEUVERING PRIORITY

No Terminal has priority over any other with regards to inbound or outbound maneuvering, inside the T2 channel, except for direct negotiation between the Terminals involved.

The terminal must inform the VTS Center of the entry priority for the vessels convened for berthing, as well as defining which vessels must unberth or shift position.

In case of conflicts or unavailability of weather conditions to carry out the maneuvers at the scheduled times, the Vessels that due to their operational characteristics can only maneuver safely in a certain tidal window and/or time will have priority.

The Port Administration, by means of the VTS Center will mediate the conflicts that may exist in the maneuver schedule, being responsible for the decision power in the queue ordering, in case the involved parties do not reach an agreement.

Military vessels and others in government service are granted, upon express request by the Maritime Authority, priority to use any berths.

By express demand of the Maritime Authority, Vessels in declared emergency will have priority in the use of any berth and/or anchorage position.

In other cases, other than those mentioned above, there is no maneuver priority for any vessel, cargo or operation, whether using Pilot services or not, unless directly negotiated between the parties involved or legal provision. For these negotiations, navigation security and item 5.2.1 Access to terminals T1 and T2 of this document must be considered.

The VTS Operator may, if deemed necessary, aid the involved parties on the priorities of maneuvers that optimize the Port's operations, always taking into consideration the safety of navigation.



5.2.3 - TRAFFIC ALONG THE CHANNELS:

Vessels navigating along the channels of the Port of Açu should keep as close as safely possible to the outer limit of the channels that are on their sides.

Anchoring and fishing activities and sports and recreation along the channels are prohibited.

5.2.4 - SAFETY SPEED FOR ACCESS TO THE TERMINALS:

According to RIPEAM 72, safety speed is defined:

"Every vessel shall at all times navigate at a safe speed so as to enable it to take appropriate and effective action to avoid collision, and to be stopped at a distance appropriate to the prevailing circumstances and conditions. The following factors should be among those to be considered when determining the safe speed: (ii) traffic density, including concentrations of fishing vessels or any other vessels".

Every vessel in transit at T1 and T2 must always sail at a safe speed to allow appropriate action to avoid collision, avoiding possible physical damage or damage to other user materials.

The Port Administration recommends that navigation be carried out at a speed of 6.0 (six) knots, avoiding speeds above 8.0 (eight) knots. In cases where the vessel's maneuverability or safety is compromised, the VTS Center must be notified in advance, so it can act to provide the necessary safety checks, being the Master of the vessel responsible for justifying the difficulty in maintaining a certain recommended speed. It is the responsibility of the Master of a vessel to take caution when interacting with other vessels and port infrastructures at risk of accidents. We pay special attention to the swell formed after the speedboat passes, which can cause small vessels to capsize or even damage moored vessels.

It is recommended to pay attention to the speed of the vessel when operating with tugboats that naturally encounter maneuverability restrictions during their operation.

It is the responsibility of the master of a vessel to take care of the interaction with other vessels and port infrastructure at the risk of accidents. We reinforce the attention to the wake formed after the passage of the speedboat, which can cause small vessels to capsize or even damage berthed vessels.

If the speed of the vessel is inadequate to the track as indicated above, the VTS Center will contact the mariner to warn about his speed and observance of traffic safety, requesting, if deemed necessary, the adaptation to the speed determined by the standards in force.

5.2.5 - OVERTAKING AND CROSSING IN THE ACCESS CHANNEL:

The overtaking and crossing maneuvers must comply with the International Regulations for Preventing Collisions at Sea (RIPEAM) and the Rules and Procedures of the Port Authority of Macaé valid for the Port of Açu (NPCP-CPM).

The access channel of Port of Açu's T1 is single lane, allowing only one ship to enter or exit at a time.

Overtaking and crossing in T2's channels are allowed for offshore support vessels and the coordination will be done among those involved, respecting the maximum speed recommendations informed in the previous item.



PO.PA.COR.005

However, the port support vessels have no restriction for crossing and overtaking in the internal channel of T2, if the rules foreseen in RIPEAM are observed and there is no obstruction/interference in maneuvers with large vessels in the area.

When observing non-compliance or insecurity in the overtaking and crossing maneuvers, the VTS Operator must intervene, providing warnings, recommendations or instructions to the users in the VTS area of the Açu Port.

The permitted overtaking and crossing section are detailed below. The stretch between the spikes' beam and the beginning of the TMULT wharf was considered, totaling a length of approximately 1.3MN.

Description	LATITUDE	LONGITUDE
Center of the channel at the beginning of the stretch (across the spikes)	21° 50,672' S	040° 59,768' W
Center of the channel at the TMULT cross	21° 51,295' S	041° 01,059' W

It is prohibited for a Vessel to cross or overtake another Vessel along the Navigation Channel when:

- Passing the breakwaters;
- Passing through the stretch between the end of the TMULT wharf (bend in the channel) to the inner anchorage (end of the channel);
- Under conditions of restricted visibility;
- > And/or one or both are restricted due to their Draught;
- > The vessel is not in good working condition; and
- > Extraordinary situations must be evaluated.

5.2.6 - INTERNAL AREAS OF CHANNEL T2 FOR VESSEL SUPPORT:

Terminal 2 has support areas for vessels in operation at the Port of Açu, in the inner area of the channel. To use these locations the vessels must contact the VTS Center via VHF radio (channel 10) or the Port Administration by e-mail: <u>acu.vts@portodoacu.com.br</u>, for approval, informing the intentions, reason and estimated time of stay.

The use of the locations will be conditioned to the availability of the area and meeting the prerequisites established by the Port Administration.

According to the fees table published on the Port of Açu website, some of these areas have fees for use or access to the internal channel.

While a vessel is staying in the internal area of T2, it is NOT AUTHORIZED:

- Performing a test within the internal channel of T2. The vessel may consult the Port Administration in advance for authorization;
- Embarking or disembarking personnel, only with the express consent of the Port Administration;
- Any type of fishing activity in the access channels, internal channel, anchorage areas and near port facilities;
- Refueling, only at authorized terminals;
- Hull cleaning above and below the waterline, only with the express consent of the Port Administration;

PROCEDURE FOR USERS IN THE VTS AREA OF THE AÇU PORT

PO.PA.COR.005



- Treatment, preparation and/or cleaning of cargo spaces (holds, tanks, decks, etc.) that may cause material to fall into the water;
- > Treatment and/or painting of open hull, deck or superstructure;
- Ballasting;
- Propeller cleaning;
- > Repairs to machines below the waterline, including side impellers;
- Boarding or landing of heavy material, which requires lifting equipment, only with the prior authorization of the Port Administration; and
- > Obstruct or interfere with the free practice of anchorage at any time.

The following painting works may be authorized after prior validation by the Port Administration:

- Draft marks (above the waterline);
- Vessel name marks, IMO number and port of registration;
- Points for tugboats to operate;
- Plimsoll disk and load lines;
- > Any other mark that may interfere with the safety of the Vessel;
- Cleaning the hull above and below the waterline for locations authorized by the environmental authority.

5.2.6.1- Use of Internal Anchorage N°11:

a) Authorized vessels (Isolated Anchorage):

- i. Maritime support vessels limited to 183M LOA and 30M Beam (ship type NOV, Technip, BPORT)*;
- ii. Port support vessels contracted by Porto do Açu Operações S/A, TUP or special contracts;
- iii. Port tugboats under contract or agreement with Porto do Açu Operações S/A, TUP or special contracts;
- iv. Boats designated to serve pilots; and
- v. Small vessels of Competent Authorities and services, which are necessary to fulfill contracts, agreements or sporadic tasks.

NOTE 1: As a good practice, smaller vessels should anchor close to the edges in the safest way possible, making the central area viable for larger vessels;

NOTE 2: In unfavorable meteoceanographic conditions, small vessels must be prioritized on site with the assessment of the VTS Operator;

NOTE 3: In unfavorable meteoceanographic conditions, taking as a reference for the VTS operator average winds of 25 Knots with gusts of 30 Knots, the isolated anchoring maneuver may be authorized under the exception that it is mandatory to maintain surveillance on the bridge of the vessel to evaluate the safe conditions of stay in F11;



NOTE 4: Before any authorization for isolated anchoring on the F11, the captain must be instructed to comply with the rules for lights and marks established in RIPEAM;

NOTE 5: Regarding the isolated anchoring scenario of a maritime support vessel described in item i., when the vessel has LOA > 100M and Beam > 20M, the anchoring of other vessels must be validated in advance by the port administration (navigation); and

NOTE 6: In cases of request for shelter due to bad weather conditions, the F11 may be used by smaller vessels for isolated anchoring, aiming to safeguard human life. It should be advised to keep the vessel in the most sheltered place possible (assess the safe margin according to the wind direction). The captain must be instructed to keep the vessel under permanent surveillance and at anchor, complying with the provisions of the RIPEAM light and marking guidelines.

b) Authorized vessels (Anchoring in STS):

i. Maritime support type vessels with maximum dimensions of 100M LOA and 20M Beam, limited to the number of four vessels anchored and moored alongside (bow/stern interspersed with the same size);

ii. Port tugboats limited to the number of 03 tugboats;

iii. Vessels of the same size, which may vary between port support, medium size and small size, limited to the number of 03 vessels.

NOTE 1: The responsibility for authorizing the berthing aboard to remain in the F11 anchored in STS lies with the Master of the first anchored vessel, who is responsible for evaluating the safe conditions for passing cables and sizing the anchor strength/resistance moorings. It will be up to the VTS operator to make this reservation during requests for anchoring in STS;

NOTE 2: Regarding the anchoring scenario of the maritime support type vessel described in item i., when the vessel has LOA> 100M and Beam> 20M, the anchoring of other vessels must be validated in advance by the port administration (navigation);

NOTE 3: As a good practice, smaller vessels anchored in STS should anchor close to the banks in the safest way possible, making the central area viable for larger vessels;

NOTE 4: Before authorizing any anchoring in STS on the F11, the Master must be instructed to comply with the rules for lights and marks established in RIPEAM;

NOTE 5: In unfavorable meteoceanographic conditions, taking as a reference for the VTS operator average winds of 25 Knots with gusts of 30 Knots, the anchoring maneuver in STS cannot be authorized; and

NOTE 6: In cases of request for shelter due to bad weather conditions, the F11 may be used by smaller vessels for anchoring, including in STS, aiming to safeguard human life. It should be advised to keep the vessel in the most sheltered place possible (assess the safe margin according to the wind direction). The captain must be instructed to keep the vessel under permanent

PROCEDURE FOR USERS IN THE VTS AREA OF THE AÇU PORT PO.PA.COR.005



surveillance and at anchor, complying with the provisions of the RIPEAM light and marking guidelines.

c) Authorized Activities:

- i. Boarding/Unboarding of Brazilian crew members, Brazilian technicians and Brazilian administrative staff;
- ii. Loading/unloading of small pieces of national origin that can be carried by hand; and
- iii. Loading/Unloading of provisions for Brazilian vessels.

d) Unauthorized Activities:

i. Boarding/Unboarding of foreign crew members, foreign technicians and foreign administrative employees;

- ii. Loading/unloading of small and medium-sized parts of international origin; and
- iii. Loading/Unloading of provisions for foreign vessels.

5.2.6.2 - Píer BAO 50:

a) Authorized vessels:

i. Port support vessels hired by Porto do Açu Operações S/A or TUP, always staying as far away as possible from the buoyed channel area;

- ii. Port tugboats contracted or under agreements with Porto do Açu Operações S/A or TUP;
- iii. Boats designated to serve pilots; and
- iv. Small vessels of Competent Authorities and services in compliance with contracts or agreements with the Port Administration.

NOTE 1: Any type of use of the TechnipFMC pier is not authorized, including mooring cables.

NOTE 2: As a reference, the maximum ship type allowed for docking at BAO50: 32M LOA / 12M BEAM.

b) Authorized Activities:

i. Boarding/Unboarding of Brazilian crew members, Brazilian technicians and Brazilian administrative staff;

ii. Loading/unloading of small pieces of national origin that can be carried by hand; and

iii. Loading/Unloading of provisions for Brazilian vessels.

c) Activities subject to prior authorization from the Port Administration:

i. Boarding/Unboarding of foreign crew members, foreign technicians and foreign administrative employees;

ii. Loading/unloading of small and medium-sized parts of international origin;



iii. Loading/Unloading of provisions for foreign vessels; and

iv. Diving operations.

5.2.6.3 – Nautical Center Pier:

PO.PA.COR.005

a) Authorized vessels:

i. Vessels designated to serve Pilotage may remain tied to the docks marked by the buoys positioned close to the floating pier, keeping only one guide cable tied to the floating pier;

ii. Port support boat and maritime authority boat; and

iii. Small vessels under consultation and prior authorization granted by the port administration.

NOTE 1: As a reference, the maximum ship type permitted for docking at the Nautical Center is established LOA>=14M / Beam>=5M.

b) Authorized Activities:

i. Boarding/Unboarding of Brazilian crew members, Brazilian technicians and Brazilian administrative staff;

- ii. Loading/Unloading of small pieces of national origin that can be carried by hand; and
- iii. Loading/Unloading of provisions for Brazilian vessels.

c) Activities subject to prior authorization from the Port Administration:

- i. Use of the Boarding and Disembarking Ramp;
- ii. Professional Diving; and
- iii. Cleaning slime from the hulls of small vessels (boats, flexboats, dinghies, etc...).

d) Unauthorized Activities:

i. Boarding/Unboarding of foreign crew members, foreign technicians and foreign administrative employees;

- ii. Loading/unloading of small and medium-sized parts of international origin; and
- iii. Loading/Unloading of provisions for foreign vessels.

5.2.6.4 – DP Maneuver in the Molhe Sul area:

The operation of the south jetty in DP (dynamic positioning) consists of the entry and remaining, in dynamic positioning, outside the buoyed channel and away from the pier of the south jetty, of the vessels authorized below for a period not exceeding 1 hour.



a) Authorized vessels:

- i. Port support vessels hired by Porto do Açu Operações S/A or TUP, always staying as far away as possible from the area of the buoyed channel and the Molhe Sul mooring pier;
- ii. Port tugboats contracted or under agreements with Porto do Açu Operações S/A or TUP;
- iii. Boats designated for commercial and pilotage services; and
- iv. Small vessels of Competent Authorities and services in compliance with contracts or agreements with the Port Administration.

NOTE 1: As a reference, the maximum vessel type permitted for operation at the south jetty is established at DP 130M. LOA / 30M. BEAM.

NOTE 2: When a FPSO is alongside the Molhe Sul pier, all vessels doing DP maneuvers will keep a safe distance of 300m (0.612NM).

b) Authorized Activities:

- i. Boarding/Unboarding of Brazilian crew members, Brazilian technicians and Brazilian administrative employees;
- ii. Loading/unloading of small pieces of national origin that can be carried by hand; and
- iii. Loading/Unloading of provisions for Brazilian vessels.

c) Unauthorized Activities:

- i. Boarding/Unboarding of foreign crew members, foreign technicians and foreign administrative employees;
- ii. Loading/Unloading of small and medium-sized parts of international origin;
- iii. Loading/Unloading of provisions for foreign vessels; and
- iv. When carrying out a docking or undocking maneuver from the South Pier.

5.2.6.5 - STS (Ship to Ship) maneuvers in vessels alongside in Terminal 2 channel:

Ship to Ship operations in the terminals carried out with vessels alongside, are previously authorized by the Port Administration if they do not exceed the navigable channel of the T2 channel. As a parameter, the VTSO will consider the maximum sum of the beams of 50 meters. The VTS Operator shall make vessels aware that, at any time, the Port Administration can request a standstill of the operation, in case it is considered unsafe or unfeasible to the port.

NOTE 1: In the N/S (north/south) section of the fairway, ship to ship maneuvers will be allowed to occur between **Technip/FMC Terminal** to **B-Port North Quay 04.**



5.2.6.6 - RESTRICTION OF VESSELS MANEUVERING INT THE PORT:

- i. Offshore/Supply Vessels that are not 100% operational for maneuver, will be subject to presenting NOTHING TO OPPOSE BY THE MARITIME AUTHORITY and verification, when necessary, of the necessity of booking pilotage service.
- ii. All vessels present in the VTS Area must be ready, in all aspects, without defects or restrictions related to engine failure, navigational equipment or crew, to navigate by own means at any time.
- iii. The vessel's Master/Captain is responsible for informing the Port Administration of any incident that may cause restrictions on board relating to the vessel's readiness.
- iv. Restricted vessels, which are unable to navigate by its own means, from or to anchorage areas, between non-adjacent quays, must be executed with the assistance of tugboats when considered appropriate by the master and with pilot on board, if necessary.
- v. If a vessel is not ready due to subaquatic activities, she must immediately suspend the operation and inform the VTS Center its readiness in 30 (thirty) minutes from the scheduled time for the maneuver.

a) According to NORMAM 311/DPC:

The following vessels are exempt of pilotage services (optional pilotage):

- Vessels (of any type) exclusively classified to operate on interior navigation and possesses Brazilian flag;
- > Foreign flag vessels, if the following conditions are met:
 - Are hired by Brazilian companies that have its headquarters and administration in the country; and
 - Possess Brazilian master/captain.
- Vessels navigating for maritime support purposes, with GT up to 3000, GT greater than 3000 and less than or equal to 5000, if the following conditions are met:

Possess maneuver assistance (support) equipment, such as:

- bow thruster;
- stern thruster;
- azimuth thruster or similar;
- possess DGPS; and
- have active AIS equipment.

NOTE 1: On the NORMAM 311/DPC, the pilot exemption does not exclude the right of the master to request tugboat assistance.

NOTE 2: Vessels with scheduled pilotage services and report maneuvering restrictions, are not required to present a **NOTHING TO OPPOSE.**



5.2.6.7 - CONVOY MANEUVERS:

- i. Convoy maneuvers (towing) composed of:
 - tug and barge; and
 - tug or vessel and/or barge or vessel.

ii. Such maneuvers **will only be authorized** to occur (inbound/outbound/shift), if the meteoceanographic parameters are within the conditions established by the Maritime Authority, regardless of period of the day.

5.3. - SAFETY AREAS:

In accordance with NORMAM-301/DPC, the following areas are considered as Safety Areas, and traffic and anchoring of vessels not involved with the operations at the Port of Açu and Industrial Complex is prohibited:

- Anchorage;
- Port access channels; and
- Proximity to port facilities.

All other Safety Areas eventually foreseen in NORMAM- 301/DPC and in the NPCP must be considered as Safety Areas at the Port of Açu, whenever applicable.

5.3.1 - FISHING, SPORTING AND RECREATIONAL ACTIVITY:

According to the NPCP, the maritime area of ports and Terminals in the jurisdiction of the CP are restricted to fishing and navigation for an area of 500 (five hundred) meters from their surroundings, except for vessels that will provide support to ships berthed at the Port or a Terminal. Thus, fishing and the practice of sports and recreational activities are prohibited within 500 (five hundred) meters of the vicinity of the Navigation Channel and anchorage areas delimited by the Maritime Authority.

5.3.2 - VESSELS REQUESTING SHELTER:

The facilities at the Port of Açu were not designed to receive and provide repairs to small vessels, especially those used for fishing and sport and recreational activities.

In emergencies where it is necessary to protect human life or the safety of navigation, the vessel must request assistance from the Brazilian Navy, by calling the number 185. If you need shelter at the Port of Açu, you must obtain authorization from VTS through the VHF call channel (channel 16).

A Vessel seeking shelter must not enter the Navigation Channel of the Port of Açu Terminals without prior authorization from the VTS Center.

The vessel must remain at the location indicated by the VTS Center for as long as it is authorized to remain there and may only leave after prior authorization.

5.4 - TRANSFER OF OIL OR DERIVATIVES BETWEEN VESSELS:

Only service providers registered with the Maritime Authority are authorized to perform oil or oil products transfer operations between vessels at the Port of Açu, as per NORMAM-204/DPC.

The user authorized by the Maritime Authority to carry out oil transfer operations between vessels at the Port of Açu must submit the respective valid authorization document to the Port Administration before starting his activities.



PO.PA.COR.005

During oil or oil products transfer operations between Vessels in the VTS Area, it is mandatory:

- > Inform the VTS Center six (6) hours prior to the start of an operation in the VTS Area;
- Use appropriate containment barriers;
- Display the CIS "B" flag during the day;
- > Display a red masthead light at night; and
- > Always keep the SOPEP kit ready for use on deck.

5.5 - PROCEDURES TO USERS FOR THE VTS SERVICE:

The information requested in routine procedures follows the IMO Standard Ship Reporting System (IMO SRS), contained in Resolution A.851(20), as well as NORMAM 602/DHN.

The interaction with the VTS Center at Port of Açu must be performed as described in the following items:

5.5.1 – Pre-Arrival Information:

- i. Vessels bound for the Port of Açu Terminals must inform the VTS Center of the Port of Açu, at least six (6) hours in advance, through the PMIS system, the following data:
- Name, prefix and flag (ALFA);
- Position in geographic coordinates (CHARLIE);
- ➢ Home port (GOLF);
- Inlet WTP in the external area of the VTS (HOTEL);
- Destination terminal (INDIA);
- Maximum Draught (OSCAR);
- Cargo: Oil tankers and ships with dangerous cargo must use the IMDG code (PAPA);
- > Update of any navigation-relevant material malfunctions or deficiencies (QUEBEC);
- > Type, dimensions and gross tonnage (UNIFORM); and
- ISPS security level (X-RAY).
- ii. The vessel must update this information in the system whenever there is a change of more than 2 hours in the ETA.
- iii. Whenever there are changes in the pre-arrival information, the Master must update and pass on the items in his voyage plan to the VTS Center at the Port of Açu.

5.5.2 – Vessel Entering VTS Area:

- i. Vessels entering the VTS area must contact the VTS Center at the Port of Açu with the following information and maneuvering intentions:
- Name of the vessel (ALFA);
- Time of the event (BRAVO);
- Position (DELTA);
- ➤ Course (ECHO);
- Speed (FOXTROT);
- Maximum Draught (OSCAR); and

PROCEDURE FOR USERS IN THE VTS AREA OF THE AÇU PORT

PO.PA.COR.005



Inform if there are any restrictions on the vessel that compromise the maneuver and the safety of navigation.

NOTE 1: The AÇU VTS CENTER will inform any berthing prospect, if reported by the terminal. In cases where there are no prospects, the VTSO will direct the vessel to the appropriate anchorage area for the vessel.

PROCEDURE FOR USERS IN THE VTS AREA OF THE AÇU PORT

PO.PA.COR.005



5.5.3 – Vessel Passing Notification Point:

- Name of the vessel (ALFA);
- Time of event (BRAVO);
- Position (DELTA);
- > Pilot: Only for T1 and T2 boarding points (JULIET); and
- > Speed (FOXTROT).

5.5.4 – Vessel Leaving VTS Area:

- Name of the vessel (ALFA);
- > Time of the event (BRAVO); and
- > Position (DELTA).

5.5.5 – Vessels Approaching Anchorage Area:

Vessels that have no wharf designated for berthing must proceed to anchorage areas, as directed by the VTS Center and established in the nautical chart, Notice to Mariners.

When anchoring, the vessel must report the following information to the VTS Center at Port of Açu:

- Name of the vessel (ALFA);
- > Time of the end of the anchoring maneuver (BRAVO); and
- > Position in geographic coordinates (CHARLIE).

5.5.6 – Vessels Suspending from Anchorage Areas (INBOUND MANOUVERS):

- i. All vessels leaving the anchorage area, must contact the AÇU VTS CENTER 15min in advance, reporting the following information:
- Name of the vessel (ALFA);
- > Expected start time for anchor aweigh (BRAVO);
- Destination (INDIA);
- Maximum draught (OSCAR); and
- Inform if there are any restrictions on the vessel that compromise the maneuver and the safety of navigation.
- ii. In the occurrence of any damage that prevents the maneuver, the ship's master must communicate the fact to the VTS Center of the Port of Açu and inform the estimated time for the repair; and
- iii. It is up to the destination TUP to establish the new date and time for the berthing maneuver to begin.

5.5.7 – Vessels Suspending from Anchorage Areas (OUTBOUND MANOUVERS):

- i. All vessels leaving the anchorage area, must contact the AÇU VTS CENTER 15min in advance, reporting the following information:
- Name of the vessel (ALFA);
- Expected start time for anchor aweigh (BRAVO); and
- Destination (INDIA).



5.5.8 - BERTHING:

i. When the vessels, waiting for the scheduling at the Port of Açu, receive the Terminal readiness information and the quay available, the mariner will have the release from the Port of Açu VTS Center, respecting the item_5.2.1 - Access to Terminals T1 and T2. You must perform the current traffic situation query and provide the following data:

- Name of the vessel (ALFA);
- Berthing end time (BRAVO);
- Position (DELTA);
- Maximum Draught (OSCAR);
- > Pilot (JULIET) or name of master (if in possession of PEC); and
- Inform if there are any restrictions on the vessel that compromise the maneuver and the safety of navigation.
- ii. During the moored period, the vessel must keep the AIS and radar on, as well as the VHF channels 10 and 16 for communication with the Port of Açu VTS Center.

5.5.9 - BERTH CHANGE:

i. For vessel movements within the same or different terminals, with or without Pilots' assistance, if the terminal and quay are ready, the Açu VTS Center must be informed 15 minutes before the maneuver begins for consultation of the current traffic situation and authorization for the event. At that time, the following data should be provided:

- Name of the vessel (ALFA);
- Terminal/Destination wharf;
- > Expected time for unberthing and berthing at the new berth (BRAVO);
- > Pilot (JULIET) or name of master (if in possession of PEC); and
- Maximum draught (OSCAR); and
- Inform if there are any restrictions on the vessel that compromise the maneuver and the safety of navigation.
- ii. During the shifting period, the vessel must keep the AIS and radar on, as well as the VHF channels 10 and 16 for communication with the Port of Açu VTS Center.

5.5.10 - UNBERTHING:

- i. The ship's master must inform the Port of Açu VTS Center 15 minutes before the start of the unberthing maneuver for consultation of the current traffic situation and authorization for the event. The following data must be entered:
- Name of the vessel (ALFA);
- > Time of the Pilot boarding and the beginning of the unberthing maneuver (BRAVO);
- > Pilot (JULIET) or name of master (if in possession of PEC);
- Destination and ETA (INDIA);
- Maximum Draught (OSCAR);
- > Cargo: Oil tankers and ships with dangerous cargo must use the IMDG code (PAPA);
- > Update of any navigation-relevant material malfunctions or deficiencies (QUEBEC); and





- > Inform if there are any restrictions on the vessel that would compromise the maneuver.
- ii. During the unberthing period, the vessel must keep the AIS and radar on, as well as the VHF channels 10 and 16 for communication with the Port of Açu VTS Center.

5.6 - INFORMATION OF ACCIDENTS AND NAIGATION FACTS:

The Port of Açu has a Nautical Emergency Plan (PEN) capable of providing resources for response to emergency situations and Operational Response Procedures (POR) that present the specific guidelines for emergency response actions for different accident scenarios.

Any type of accidents and facts of navigation - as defined in NORMAN-302/DPC, item 1.6 - or any type of incident that may impact on the safety of navigation and the environment, must be immediately informed via VHF CH10 to the Port of Açu VTS Center.

In case of occurring close to the destination terminal, both the vessel and the terminal must inform the VTS Porto do Açu Center via VHF CH10.

In addition to communicating with the VTS the Master must:

- Inform the details of the ship(s) or vessel(s) involved in the incident, its severity, location, and the immediate actions taken and those required; and
- Trigger the initial response actions on board, according to the procedures provided in the Emergency/Safety Plan of the ship or vessel.

Full details of the event must be provided. If appropriate, the Hazardous Cargo, Harmful Substances or Water Pollution reports should be sent to: acu.vts@portodoacu.com.br

According to the PEN and POR of Port of Açu, below we present the accidental scenarios identified and likely to occur during vessel operations, both in transit and when berthed or maneuvering at the Port of Açu:

- Collision between vessels in transit;
- > Sinking of an anchored or berthed vessel;
- > Running aground of a vessel in transit or maneuvering;
- Vessel drift / Emergency government;
- Shipwreck;
- > Collision of a vessel with the wharf when berthing or unberthing;
- Vessel evacuation;
- > Explosion / fire on board an anchored vessel (internal or external anchoring areas);
- Accident on board;
- Dropping cargo or equipment from a vessel in transit;
- > Fall of Terminal equipment onto vessel;
- > Oil / fuel leakage from the vessel; and
- > Accidental disposal of oily waste / gray water / black water in the Channel.

In adverse environmental conditions, such as poor visibility, currents, and wind, participating vessels must also:

- > Report movement restrictions or inability to move; and
- > Request extension of domain or greater separation between vessels, when applicable.



5.7 - PILOTAGE SERVICES:

Pilotage within the limits of the port (internal zone) is done in accordance with the Maritime Authority Standards for Pilotage Service (NORMAM-311/DPC) and, where applicable, with the Standards and Procedures of the Port Authority of Rio de Janeiro (NPCP-CPM).

Among the competencies of the Pilots mentioned in the mentioned NORMAM, the Port Administration highlights:

- "To assist the Vessel Master in running the pilotage task, meeting, promptly and efficiently, the requirements of the Pilotage Service."; and
- "To establish such communications as may be necessary with the VTS and other vessels transiting the ZP in order to ensure the safety of waterway traffic."

All vessels destined for the Port of Açu with the assistance of the Pilotage Service must board/land the Pilot at the boarding point established by the Maritime Authority. If the safety of the Pilots' boarding/landing is compromised, the Master must inform the VTS Center of the Port of Açu, with the agreement of the Pilotage Service, of his specific need not to comply with this rule.

5.8 - TUGBOATS:

The use of tugboats is compulsory for all vessels demanding Terminals T1 and T2 and, according to the Port Regulation, it is up to the TUP to coordinate with the tugboat companies the support the needs for berthing and unberthing operations.

5.9 - COMMUNICATION CHANNEL (CONTACTO US):

The company encourages the receipt of information, which will be analyzed and allow for a constant improvement of the services provided by the Port of Açu VTS Center, through the link https://canalconfidencial.com.br/falecomoportodoacu/, including the possibility of anonymity and the attachment of files.

The information registered in CONTACT US has appropriate secrecy and treatment for each situation, including the anonymous release of data. Link: <u>https://canalconfidencial.com.br/falecomoportodoacu/.</u>

Porto do Açu Operações SA encourages you to fill out the form at any time, as an important measure to improve the company's services and demands.

6 - ANNEXES:

Not applicable

7 – REVISION TABLE:

	Revision Table			
Version	ltem	Description of changes		
01	-	Creation of Procedure		
02	-	General Procedure Review		
03	-	General Procedure Review		
04	-	General Procedure Review		

PROCEDURE FOR USERS IN THE VTS AREA OF THE AÇU PORT



PO.PA.COR.005

05	-	Adequacy to the new IMO resolution 2021		
06	-	Update of procedures		
07	3	PEN: GED reference number		
	5.1.1	NORMAM number update		
	5.1.6	ANCHORAGE N° 05 (LNG) coordinates update		
	5.3.4	DP Maneuvers in Molhe Sul area		
	5.3.5	STS Maneuvers		
	5.3.6.1	Convoy Maneuvers		
	5.3.11.6	Vessels suspending from anchorage area (INBOUND MANOUVER)		
	5.3.11.7	Vessels suspending from anchorage area (OUTBOUND MANOUVER)		
Responsible				
			Approval	
VTS Manager and VTSO			VTS Manager	