PROPOSAL TO MODIFY THE PANAMA CANAL TOLLS SYSTEM AND THE REGULATIONS FOR THE ADMEASUREMENT OF VESSELS

April 2022





Message from the Administrator of the Panama Canal

The Panama Canal Authority Board of Directors approved a proposal that modifies the Panama Canal tolls' structure and admeasurement regulations; once the process is completed, the modifications will go into effect on January 1, 2023. The proposal establishes a simplified structure which provides price stability up to year 2025.

With the issuance of this proposal, the public consultation period opens until May 17, 2022, at 4:15 p.m. local time. The public hearing is scheduled for May 20, 2022, at 9:00 a.m., local time.

Ricaurte Vásquez M. Administrator/CEO

CONTENT

I.	Background1
II.	Rationale of the proposal1
III.	Proposal4
IV.	Implementation

ANNEXES

Annex A - Panama Canal Record	
Annex B - Legal references	

PROPOSAL TO MODIFY THE PANAMA CANAL TOLLS SYSTEM AND THE REGULATIONS FOR THE ADMEASUREMENT OF VESSELS

I. BACKGROUND

The Panama Canal pricing strategy and its underlying toll and tariff structure have undergone numerous changes since the Canal began operations in 1914. The most significant of these changes began after the transition to Panamanian administration, which included a detailed segmentation, application of multiple billing units, dimensions, ranges, incentive programs and even specifications by type of cargo carried.

The current toll structure is characterized using price bands, which apply different rates to each additional level of cargo capacity of ships, which totals more than 400 toll rates. This structure makes it difficult to set tolls according to the value provided for each type and size of the vessel, because the lower bands apply to subsequent capacity levels. In addition to toll rates, there are 144 rates related to the loyalty program, 11 special rates for return trips and more than 90 rates for ships in ballast.

Considering that the current toll structure has become overly complex and may lead to confusion and misinterpretations among different market segments and does not provide predictability to customers, in December 2021 the Panama Canal shared proposed price structure modifications with customer associations and maritime organizations that provided feedback. Based on this, the Canal proposes a simplified toll structure in the medium term that provides predictability to its customers, supports strategic objectives, and reflects the value of the route.

II. RATIONALE OF THE PROPOSAL

1. The Panama Canal price policy and the economic criteria that serve as its basis:

- Tolls will be established so that they reflect the value provided by the Canal to its users.
- Tolls will be set so that their relative value is maintained over time and will be periodically adjusted for inflation.
- Tolls will be established at appropriate levels to always uphold the competitiveness of the Panama route and to reach a profitability level in accordance with the risk levels, and investment amounts. Thus, payments to the National Treasury and the benefits to Panama could be increased in a sustainable manner.

2. Objectives, considerations, and general concepts of the proposal

In compliance with its constitutional mandate of being safe, reliable, and profitable, the Panama Canal Authority proposes an adjustment in the tolls and structure of most of the market segments and changes to the Regulation for the Admeasurement of Vessels to Assess Tolls for the Use of the Panama Canal. This adjustment will lead to a more simplified and predictable tariff structure.

This announcement contemplates price adjustments for the period 2023-2025, which will provide our customers with sufficient predictability so that they can plan and adjust their business plans.

The new pricing structure is based on the following principles:

Value-based pricing: The toll structure will be designed to reflect the economic value the Canal provides to each of its different types of customers.

Predictability: The toll structure and tariffs will be adjusted at regular intervals, and any changes will be announced with enough lead time to allow customers sufficient foresight to conduct their businesses and make any necessary adjustments.

Simplicity: The toll structure will avoid any confusions, misinterpretations caused by unnecessary complexity.

The main concepts and considerations of this proposal are:

Replacement of pricing bands with fixed and capacity tariffs:

The Authority proposes a more uniform and simplified structure which will eliminate pricing bands and introduce single tariffs according to locks utilized and the type and size of vessel. The proposed structure is based on two main components:

- 1. A fixed tariff per transit, in accordance with the locks utilized and the vessel size category (regular, super or neopanamax). For certain vessel types and sizes, these categories are further divided for the tariffs to reflect the value the Canal provides to its clients.
- 2. A capacity tariff by vessel type, size category and billing unit, which reflects the value of the service provided by the Canal to each market segment and size category.

Tariff adjustments for vessels in ballast

The current toll structure contains multiple tariff items for vessels which transit in ballast. These ballast transits differ by vessel size and type in a way that is not consistent with the value provided to the client.

The proposed tolls for vessels transiting in ballast contemplates the assessment of a percentage of the regular tolls, regardless of market segment. The assessment of tolls to vessels in ballast will be in accordance with the conditions stated in article 25 of the Regulation for the Admeasurement of Vessels to Assess Tolls for the Use of the Panama Canal.

Special tariffs for return trips

The proposal includes the elimination of special discounted tariffs for return trips for container vessels and liquified natural gas (LNG) vessels.

Announcements of future tolls adjustments

Through this notification, the Authority announces annual tolls adjustments until the year 2025. For periods beyond this proposal, each announcement will be preceded by consultation with clients in accordance with the Organic Law of the Panama Canal Authority which intends to provide a level of short to medium term predictability.

3. Value of the route of the Panama Canal

The value of the route through Panama lies in both time and distance savings, together with the connectivity to 180 maritime routes (1,920 ports in 170 countries), safety and reliability of transits, and value-added benefits of the various elements that comprise the transportation and logistics hub of the country. Panama offers air and maritime connectivity that represents an added value complementary to the Canal route, in addition to complementary activities and cargo transshipment.

4. Glossary of relevant terms included in the proposal

The words, expressions and acronyms used in this proposal will have the following definitions:

Neopanamax vessel. Vessel with beam greater than 107 feet (32.61 meters) and/or length overall greater than 966 feet (294.44 meters). For tolls assessment purposes, vessels transiting with tropical freshwater draft of 39'09" (12.12 meters) or greater, and vessels which due to a condition or deficiency require transit through de neopanamax locks, will be considered as neopanamax vessels.

Regular vessel. Vessel with beam less than 91 feet (27.74 meters).

Super vessel. Vessel with beam equal to or greater than 91 feet (27.74 meters).

Tolls assessment to vessels in ballast condition. Percentage of the regular laden toll charge.

Vessel in ballast condition. Vessel which transits the Panama Canal without passengers or cargo, in compliance with the conditions stated in Article 25 of Regulation for the Admeasurement of Vessels to Assess Tolls for the Use of the Panama Canal.

Capacity tariff. Tariff assessed for the vessel's cargo capacity, as determined by the admeasurement performed by the Panama Canal.

Fixed tariff. Fixed amount charged per transit.

TEU: cargo capacity of a 20-foot in length, by 8 feet wide and 8.5 feet tall container.

TEU reefer. Specialized 20-foot container, also known as "reefer," with its own refrigeration system connected to the vessels power supply.

TEU dry. A 20-foot container with commercial cargo.

TEU empty. Any 20-foot container without commercial cargo.

TTA. Total TEU capacity, referring to the total TEU allowed in a vessel.

TTE. Total empty TEU.

TTL. Total TEU with cargo.

III. PROPOSAL

The Authority proposes the modification of the tolls system and the regulations for the admeasurement of vessels establishing simplified structures for most market segments (see tables referring to each segment).

The proposed modifications will ensure that the Canal competitiveness is maintained, while adapting to the current market situation, thereby allowing the Canal to continue providing a safe, reliable, and efficient service to world trade.

Below are the details of the proposed modifications for each market segment for the years 2023 to 2025:

1. Proposed adjustments for the container vessels segment:

- a. A fixed tariff per transit is introduced, which depends on the locks utilized and the vessel size category (regular, super or neopanamax). Neopanamax vessels are further differentiated in vessels of less than 10,000 TEU of TTA capacity, and vessels equal or greater than 10,000 TEU of TTA capacity to reflect the value provided by the Canal to these clients.
- b. The TEU is maintained as the unit of measurement for the calculation of tolls.
- c. The current pricing bands are replaced with capacity tariffs by vessel size category (regular, super or neopanamax) based on the total TEU allowed (TTA), which is intrinsically related to the value that the Canal provides to each market segment and size category.
- d. Tariffs of loaded TEU (TTL) are maintained; a new tariff that recognizes the repositioning value of empty containers is introduced (TTE); and the return voyage tariff for loaded containers (TTLR) is eliminated.
- e. The loyalty program is simplified by reducing its six loyalty categories to one, replacing the use of tariffs by category with a percentage applied to the tolls, applicable to clients that accumulate more than 1.5 million TEU capacity (TTA) per year. This is a level equivalent to the category "1" of the current loyalty program.

- f. Starting January 1, 2023, the loyalty category will be determined based on the accumulated volume of maximum TEU capacity registered for Canal transits during 12 consecutive months, similar to the current calculation.
- g. Starting January 1, 2023, clients deploying more than 1.5 million TEU capacity (TTA) per year, will pay 95% of their regular tolls; starting January 1, 2024, such clients will pay 97.5% of their regular tolls.
- h. Starting January 1, 2025, the loyalty program will be eliminated.
- i. The calculation of allowed containers on deck will be adjusted to a visibility condition of 2 ship lengths, which will also result in the adjustment of the calculation of total TEU allowed (TTA).

	E	Effective Janu	ary 1, 2023		Effective January 1, 2024 Effective January 1, 2025			Effective January 1, 2025				
Container	Fixed Tariff (per transit)	Capacity TTA (per TEU)	Loaded TTL (per TEU)	Empty TTE (per TEU)	Fixed Tariff (per transit)	Capacity TTA (per TEU)	Loaded TTL (per TEU)	Empty TTE (per TEU)	Fixed Tariff (per transit)	Capacity TTA (per TEU)	Loaded TTL (per TEU)	Empty TTE (per TEU)
Regular	\$60,000	\$40.00	\$30.00	\$5.00	\$60,000	\$40.00	\$32.50	\$6.50	\$60,000	\$40.00	\$35.00	\$8.00
Super	\$100,000	\$40.00	\$30.00	\$5.00	\$100,000	\$40.00	\$32.50	\$6.50	\$100,000	\$40.00	\$35.00	\$8.00
Neo TEU < 10,000	\$200,000	\$30.00	\$30.00	\$5.00	\$200,000	\$30.00	\$32.50	\$6.50	\$200,000	\$30.00	\$35.00	\$8.00
Neo TEU <u>></u> 10,000	\$300,000	\$30.00	\$40.00	\$5.00	\$300,000	\$30.00	\$42.50	\$6.50	\$300,000	\$30.00	\$45.00	\$8.00

Proposed tolls for container vessels

Illustrative example -

neopanamax. A 12,000 TEU neopanamax container ship, with a utilization of 90% of loaded containers and 10% of empty containers, would pay the following toll from January 1, 2023:

	Container Vessel Neopanamax Example							
	Item	# of TEU	Tariff per TEU	Total				
А	Neopanamax Fixed Tariff TEU <u>></u> 10,000			\$300,000.00				
В	Capacity Tariff per TEU - TTA	12,000	\$30	\$360,000.00				
С	Laden Tariff per TEU - TTL	10,800	\$40	\$432,000.00				
D	Empty Tariff per TEU - TTE	1,200	\$5	\$6,000.00				
	Total Tolls (A+B+C+D)		\$1	,098,000.00				

If the customer registers a cumulative volume of more than 1.5 million TEU of capacity in a period of 12 consecutive months, the toll will be 95% of the regular toll, that is, *\$1,043,100.00* under the Loyalty Program.

2. On board TEU applicable to vessels which are not container vessels that transport containers on deck:

On deck TEU tariffs are adjusted for vessels other than container vessels.

On deck TEU on vessels other than container vessels	Effective January 1, 2023	Effective January 1, 2024	Effective January 1, 2025	
TEU reefer	\$110.00	\$115.00	\$120.00	
TEU dry	\$100.00	\$105.00	\$110.00	
TEU empty	\$60.00	\$65.00	\$70.00	

Proposed TEU tolls for on deck containers in vessels other than container vessels

The calculation of tolls for vessels in ballast, applying 90% to their laden tolls, will only apply to the components of fixed and capacity tariffs. This calculation will not apply to the tariffs of TEU reefer, TEU dry nor TEU empty on deck which vessels in ballast might transport.

3. Proposed adjustments to the tolls of Vehicle Carriers/RoRo:

The proposed adjustments to the tolls of vehicle carriers/RoRo are the following:

- a. A fixed tariff per transit is introduced which depends on the locks utilized and the vessels size category (regular, super or neopanamax).
- b. The PC/UMS ton is maintained as the capacity measurement unit for the calculation of tolls.
- c. A capacity tariff is established according to the vessel size category (regular, super or neopanamax) based on its PC/UMS tons of capacity.
- d. The tolls for vessels in ballast will be 90% of the laden toll.
- e. The use of the concept of utilization percentage of the structure (metric tons divided by dead weight) is eliminated.

	Effective January 1, 2023		Effective Jan	uary 1, 2024	Effective January 1, 2025			
Vehicle Carriers/RoRo	Fixed Fee (per transit)	Capacity Tariff (PC/UMS)	Fixed Fee (per transit)	Capacity Tariff (PC/UMS)	Fixed Fee (per transit)	Capacity Tariff (PC/UMS)		
Regular	\$60,000	\$2.00	\$60,000	\$4.00	\$60,000	\$6.00		
Super	\$100,000	\$3.40	\$100,000	\$4.10	\$100,000	\$4.75		
Neopanamax	\$300,000	\$2.00	\$300,000	\$2.50	\$300,000	\$2.75		

Proposed tolls for vehicle carriers/RoRo

<i>Illustrative example -</i> <i>super</i> . A vehicle carrier	Vehicle Carrier / RoRo Vessel Super Example			
/ RoRo, super with 57,248 PC/UMS	Item	PC/UMS	Unit Rate	Total
capacity, would pay the	A Super Fixed Tariff per PC/UMS			\$100,000.00
following toll from	B Capacity Tariff per PC/UMS	57,248	\$3.40	\$194,643.20
January 1, 2023:	Total Tolls (A+B)			\$294,643.20

If the ship transits in ballast, the toll would be 90% of its toll with cargo, that is, \$265,178.88.

4. Proposed adjustments to the tolls of passenger vessels:

The proposed adjustments to the tolls of passenger vessels are as the following:

- a. A fixed tariff per transit is introduced which depends on the locks utilized and the vessels size category (regular, super or neopanamax).
- b. The PC/UMS ton is maintained as the capacity measurement unit for the calculation of tolls.
- c. Separate tariffs are established for regular vessels of less than 10,000 PC/UMS tons and for those equal to or greater than 10,000 PC/UMS tons of capacity.
- d. A capacity tariff is established according to the vessel size category (regular, super or neopanamax) based on its PC/UMS ton capacity.
- e. The tolls for vessels in ballast will be 90% of the laden toll.

	Effective Ja	anuary 1, 2023	Effective Jan	uary 1, 2024	Effective January 1, 2025		
Passengers	Fixed Fee (per transit)	Capacity Tariff (PC/UMS)	Fixed Fee (per transit)	Capacity Tariff (PC/UMS)	Fixed Fee (per transit)	Capacity Tariff (PC/UMS)	
Regular < 10,000 CP/SUAB	\$25,000	\$2.15	\$25,000	\$3.20	\$25,000	\$4.25	
Regular <u>></u> 10,000 CP/SUAB	\$60,000	\$2.60	\$60,000	\$3.80	\$60,000	\$5.00	
Super	\$100,000	\$4.75	\$100,000	\$5.15	\$100,000	\$5.50	
Neopanamax	\$300,000	\$3.75	\$300,000	\$4.65	\$300,000	\$5.50	

Proposed tolls for passenger vessels

Illustrative example - super. A passenger	Passenger Vessels Super Example					
vessel, super with 79,580 PC/UMS capacity, would	Item	PC/UMS	Unit Rate	Total		
pay the following toll	A Super Fixed Tariff per PC/UMS			\$100,000.00		
from January 1, 2023:	B Capacity Tariff per PC/UMS	79,580	\$4.75	\$378,005.00		
	Total Tolls (A+B)			\$478,005.00		

If the ship transits in ballast, the toll would be 90% of its toll with cargo, that is, \$430,204.50.

5. Proposed adjustments to the tolls of tanker vessels:

The proposed adjustments to the tolls of tanker vessels are the following:

- a. A fixed tariff per transit is introduced which depends on the locks utilized and the vessels size category (regular, super or neopanamax).
- b. The PC/UMS ton is maintained as the capacity measurement unit for the calculation of tolls.
- c. A capacity tariff is established according to the vessel size category (regular, super or neopanamax) based on its PC/UMS tons of capacity.
- d. The metric tons of cargo tariff for laden neopanamax vessels is eliminated.
- e. The tolls for vessels in ballast will be 90% of the laden toll.

	Effective January 1, 2023		Effective Jan	uary 1, 2024	Effective January 1, 2025			
Tankers	Fixed Fee (per transit)	Capacity Tariff (PC/UMS)	Fixed Fee (per transit)	Capacity Tariff (PC/UMS)	Fixed Fee (per transit)	Capacity Tariff (PC/UMS)		
Regular	\$60,000	\$2.50	\$60,000	\$4.25	\$60,000	\$6.00		
Super	\$100,000	\$3.15	\$100,000	\$4.10	\$100,000	\$5.25		
Neopanamax	\$300,000	\$1.30	\$300,000	\$2.25	\$300,000	\$3.25		

Proposed tolls for tanker vessels

Illustrative example -

super. A tanker, super with 22,372 PC/UMS capacity, would pay the following toll from January 1, 2023:

	Tanker Vessel Super Example							
	Item	PC/UMS	Unit Rate	Total				
А	Super Fixed Tariff per PC/UMS			\$100,000.00				
В	Capacity Tariff per PC/UMS	22,372	\$3.15	\$70,471.80				
	Total Tolls (A+B)			\$170,471.80				

If the ship transits in ballast, the toll would be 90% of its toll with cargo, that is, \$153,424.62.

6. Proposed adjustments to the tolls of chemical carriers:

The proposed adjustments to the tolls of chemical carriers are the following:

- a. A fixed tariff per transit is introduced which depends on the locks utilized and the vessels size category (regular, super or neopanamax).
- b. The PC/UMS ton is maintained as the capacity measurement unit for the calculation of tolls.
- c. A capacity tariff is established according to the vessel size category (regular, super or neopanamax) based on its PC/UMS tons of capacity.
- d. The tolls for vessels in ballast will be 90% of the laden toll.

r toposed tons for enemiear carriers								
	Effective January 1, 2023		Effective Jan	uary 1, 2024	Effective January 1, 2025			
Chemical Carriers	Fixed Fee (per transit)	Capacity Tariff (PC/UMS)	Fixed Fee (per transit)	Capacity Tariff (PC/UMS)	Fixed Fee (per transit)	Capacity Tariff (PC/UMS)		
Regular	\$60,000	\$4.45	\$60,000	\$5.00	\$60,000	\$5.50		
Super	\$100,000	\$3.00	\$100,000	\$4.00	\$100,000	\$5.25		
Neopanamax	\$300,000	\$1.30	\$300,000	\$2.25	\$300,000	\$3.25		

Proposed tolls for chemical carriers

Illustrative	example -
--------------	-----------

er	Chemical Vessel Super Example						
		Item	PC/UMS	Unit Rate	Total		
	А	Super Fixed Tariff per PC/UMS			\$100,000.00		
	В	Capacity Tariff per PC/UMS	24,683	\$3.00	\$74,049.00		
		Total Tolls (A+B)			\$174,049.00		

If the ship transits in ballast, the toll would be 90% of its toll with cargo, that is, \$156,644.10.

7. Proposed adjustments to the tolls of liquefied petroleum gas carriers (LPG):

The proposed adjustments to LPG tolls are the following:

- a. A fixed tariff per transit is introduced which depends on the locks utilized and the vessels size category (regular, super or neopanamax).
- b. The cubic meter (m^3) is maintained as the capacity measurement unit for the calculation of tolls.
- c. A capacity tariff is established according to the vessel size category (regular, super or neopanamax), based on the cubic meters (m³) of capacity.
- d. The tolls for vessels in ballast will be 90% of the laden toll and will apply to vessels which transit with a maximum cargo of 2% of the total cubic meter (m³) of cargo capacity.

	Effective January 1, 2023		Effective Jan	uary 1, 2024	Effective January 1, 2025			
LPG	Fixed Fee (per	Capacity tariff	Fixed Fee (per	Capacity tariff	Fixed Fee (per	Capacity tariff		
	transit)	(m ³)	transit)	(m ³)	transit)	(m ³)		
Regular	\$60,000	\$1.60	\$60,000	\$2.55	\$60,000	\$3.50		
Super	\$100,000	\$2.75	\$100,000	\$3.25	\$100,000	\$3.85		
Neopanamax	\$300,000	\$0.90	\$300,000	\$1.85	\$300,000	\$2.75		

Proposed tolls for LPG vessels

<i>Illustrative example -</i> <i>neopanamax.</i> A neopanamax	LPG Vess Neopanamax			
LPG vessel with 84,000 m ³ capacity would pay the	Item	M ³	Unit Rate	Total
following toll from January 1,	A Neopanamax Fixed Tariff per m ³			\$300,000.00
2023:	B Capacity Tariff per m ³	84,000	\$0.90	\$75,600.00
	Total Tolls (A+B)			\$375,600.00

If the ship transits in ballast, the toll would be 90% of its toll with cargo, that is, \$338,040.00.

8. Proposed adjustments to the tolls of liquefied natural gas carriers (LNG):

The proposed adjustments to the LNG tolls are the following:

- a. A fixed tariff per transit is introduced which depends on the locks utilized and the vessels size category (regular, super or neopanamax).
- b. The cubic meter (m^3) is maintained as the capacity measurement unit for the calculation of tolls.
- c. A capacity tariff is established according to the vessel size category (regular, super or neopanamax), based on the cubic meters (m³) of capacity.
- d. The tolls for vessels in ballast are determined to be 90% of the laden toll and will apply to vessels which transit with a maximum cargo of 10% of the total cubic meter (m^3) of cargo capacity.
- e. The special ballast tariff applied in the roundtrip (return trip) is eliminated.

	Effective January 1, 2023		Effective Jan	uary 1, 2024	Effective January 1, 2025			
LNG	Fixed Fee (per transit)	Capacity tariff (m ³)	Fixed Fee (per transit)	Capacity tariff (m ³)	Fixed Fee (per transit)	Capacity tariff (m³)		
Regular	\$60,000	\$1.60	\$60,000	\$2.55	\$60,000	\$3.50		
Super	\$100,000	\$2.75	\$100,000	\$3.25	\$100,000	\$3.85		
Neopanamax	\$300,000	\$1.35	\$300,000	\$1.70	\$300,000	\$2.05		

Proposed tolls for LNG vessels

Illustrative example neopanamax. An LNG vessel with 174,000 m³ capacity would pay the following toll from January 1, 2023:

	LNG Vessels Neopanamax Example						
	Item	M³	Unit Rate	Total			
А	Neopanamax Fixed Tariff per m ³			\$300,000.00			
В	Capacity Tariff per m ³	174,000	\$1.35	\$234,900.00			
	Total Tolls (A+B) \$534,900						

If the ship transits in ballast, the toll would be 90% of its toll with cargo, that is, \$481,410.00.

9. Proposed adjustments to the tolls of dry bulk vessels:

The adjustments to the tolls of dry bulk vessels are the following:

- a. A fixed tariff per transit is introduced which depends on the locks utilized and the vessels size category (regular, super or neopanamax).
- b. The deadweight ton (DWT) is maintained as the unit of capacity measurement for the calculation of tolls.
- c. A capacity tariff is established according to the vessel size category (regular, super or neopanamax), based on its DWT capacity.
- d. The metric tons of cargo tariffs for laden neopanamax vessels are eliminated.
- e. The tariff groups of four commodities (grains, coal, iron ore and other dry bulk) are consolidated into one single tariff group.
- f. The tolls for vessels in ballast will be 90% of the laden toll.

	Effective Ja	nuary 1, 2023	Effective Jan	uary 1, 2024	Effective January 1, 2025	
Dry Bulk	Fixed Fee (per transit)	Capacity tariff (DWT)	Fixed Fee (per transit)	Capacity tariff (DWT)	Fixed Fee (per transit)	Capacity tariff (DWT)
Regular	\$60,000	\$1.00	\$60,000	\$1.25	\$60,000	\$1.65
Super	\$100,000	\$1.10	\$100,000	\$1.15	\$100,000	\$1.50
Neopanamax	\$300,000	\$0.25	\$300,000	\$0.50	\$300,000	\$0.80

Proposed tolls for dry bulk vessels

Illustrative	example –
--------------	-----------

super: A dry bulk vessel, super with 56,781 DWT capacity would pay the following toll from January 1, 2023:

	Dry Bulk Vessel Super Example						
	Item	DWT	Unit Rate	Total			
А	Super Fixed Tariff per DWT			\$100,000.00			
В	Capacity Tariff per DWT	56,781	\$1.10	\$62,459.10			
	Total Toll (A+B) \$162,459.1						

If the ship transits in ballast, the toll would be 90% of its toll with cargo, that is, \$146,213.19.

10. Proposed adjustments to the tolls of reefer, general cargo, and other vessels:

The proposed adjustments to the tolls of reefer, general cargo and other vessels are the following:

- a. A fixed tariff per transit is introduced which depends on the locks utilized and the vessels size category (regular, super or neopanamax).
- b. The PC/UMS ton is maintained as the capacity measurement unit for the calculation of tolls.
- c. In the case of reefers and general cargo regular vessels, separate tariffs are established, for vessels of less than 10,000 and for vessels equal to or greater than 10,000 PC/UMS tons of capacity.
- d. In the case of regular vessels in the "others" segment, separate tariffs are established, for vessels of less than 7,500 and for vessels equal to or greater than 7,500 PC/UMS tons of capacity.
- e. A capacity tariff is established according to the vessel size category (regular, super or neopanamax) based on its PC/UMS ton capacity.
- f. The tolls for vessels in ballast will be 90% of the laden toll.

	Effective January 1, 2023		Effective Jan	uary 1, 2024	Effective January 1, 2025	
Reefers	Fixed Fee (per transit)	Capacity Tariff (PC/UMS)	Fixed Fee (per transit)	Capacity Tariff (PC/UMS)	Fixed Fee (per transit)	Capacity Tariff (PC/UMS)
Regular < 10,000 CP/SUAB	\$25,000	\$2.25	\$25,000	\$2.75	\$25,000	\$3.50
Regular ≥ 10,000 CP/SUAB	\$60,000	\$1.40	\$60,000	\$2.35	\$60,000	\$3.25
Super	\$100,000	\$1.75	\$100,000	\$2.40	\$100,000	\$3.00
Neopanamax	\$300,000	\$0.75	\$300,000	\$1.15	\$300,000	\$1.50

Proposed tolls for reefer vessels

Illustrative example -

regular. A reefer vessel, regular with 12,166 PC/UMS capacity, with 115 TEU reefer, and 24 TEU empty on deck, would pay the following toll from 1 January 2023:

	Refrigerated Cargo Vessel Regular Example						
	Item	PC/UMS or NTT	Unit Rate	Total			
А	Regular Fixed Tariff <u>></u> 10,000 PC/UMS			\$60,000.00			
В	Capacity Tariff per PC/UMS	12,166	\$1.40	\$17,032.40			
С	Refrigerated TEU on deck Tariff	115	\$110	\$12,650.00			
D	Empty TEU on deck Tariff	24	\$60	\$1,440.00			
	Total Tolls (A+B+C+D)			\$91,122.40			

If the ship transits in ballast, the toll would be 90% of its toll with cargo applied only to its fixed rate and capacity components, that is, \$69,329.16.

	Effective Ja	anuary 1, 2023	Effective Jan	uary 1, 2024	Effective January 1, 2025	
General Cargo	Fixed Fee (per transit)	Capacity Tariff (PC/UMS)	Fixed Fee (per transit)	Capacity Tariff (PC/UMS)	Fixed Fee (per transit)	Capacity Tariff (PC/UMS)
Regular < 10,000 CP/SUAB	\$25,000	\$2.75	\$25,000	\$3.15	\$25,000	\$3.50
Regualr ≥ 10,000 CP/SUAB	\$60,000	\$1.65	\$60,000	\$2.45	\$60,000	\$3.25
Super	\$100,000	\$2.00	\$100,000	\$2.50	\$100,000	\$3.00
Neopanamax	\$300,000	\$0.75	\$300,000	\$1.15	\$300,000	\$1.50

Proposed tolls for general cargo vessels

Illustrative example - super. A general cargo vessel (container breakbulk), super with 27,152 PC/UMS capacity, with 245 TEU dry and 4 TEU empty on deck, would pay the following toll from 1 January 2023:

	General Cargo Vessel Super Example							
	ltem	PC/UMS or Unit TEU on Deck Rate		Total				
А	Super Fixed Tariff per PC/UMS			\$100,000				
В	Capacity Tariff per PC/UMS	27,152	\$2.00	\$54,304.00				
С	Dry TEU on deck Tariff	245	\$100	\$24,500.00				
D	Empty TEU on deck Tariff	4	\$60	\$240.00				
	Total Tolls (A+B+C+D) \$179,044.0							

If the ship transits in ballast, the toll would be 90% of its toll with cargo applied only to the components of its fixed and capacity rate, that is, \$138,873.60

		tons for "othe				
	Effective Ja	nuary 1, 2023	Effective Jan	uary 1, 2024	Effective January 1, 2025	
Others	Fixed Fee (per	Capacity Tariff	Fixed Fee (per	Capacity Tariff	Fixed Fee (per	Capacity Tariff
	transit)	(PC/UMS)	transit)	(PC/UMS)	transit)	(PC/UMS)
Regular < 7,500 CP/SUAB	\$15,000	\$2.00	\$15,000	\$2.50	\$15,000	\$3.00
Regular ≥ 7,500 CP/SUAB	\$60,000	\$1.65	\$60,000	\$2.40	\$60,000	\$3.25
Super	\$100,000	\$1.50	\$100,000	\$2.25	\$100,000	\$3.00
Neopanamax	\$300,000	\$0.75	\$300,000	\$1.15	\$300,000	\$1.50

Proposed tolls for "others" vessel segment

Illustrative example -

regular. A regular vessel of the other category (*cable ship*) with 11,893 PC/UMS capacity would pay the following toll from 1 January 2023:

	Other Vessels Regular Example							
	Item	PC/UMS	Unit Rate	Total				
А	Regular Fixed Tariff per PC/UMS <u>></u> 7,500 PC/UMS			\$60,000.00				
В	Capacity Tariff per PC/UMS	11,893	\$1.65	\$19,623.45				
	Total Tolls (A+B)			\$79,623.45				

If the ship transits in ballast, the toll would be 90% of its toll with cargo applied only to the components of its fixed rate and capacity, that is, \$71,661.11.

11. Proposed adjustments to small vessels tolls

The proposed modifications to small vessel tolls involve adjustments to the maximum limits of displacement tonnage established by tolls based on length overall.

a. These tolls apply to all small vessels (length overall up to 125 feet).

- b. Vessels of length overall greater than 125 feet, of any market segment, with PC/UMS tonnage up to 999 as the maximum limit, will be applied the small vessels tolls in the length overall range greater than 100 feet, in addition to all related charges for other maritime services.
- c. The proposed modifications to small vessel tolls involve adjustments to the maximum limits of displacement tonnage established by tolls based on length overall (1,000 displacement tons). Vessels with a displacement tonnage greater than 1,000 will be assessed tolls based on the proposed displacement tolls.

Troposed tons for sman vessels							
Length ove	erall range	Proposed Small Vessels Tolls					
Meters	Feet	Effective January 1, 2023	Effective January 1, 2024	Effective January 1, 2025			
< 19.812	< 65	\$1,760	\$1,935	\$2,130			
<u>></u> 19.812 <u><</u> 24.384	<u>></u> 65 <u><</u> 80	\$2,640	\$2,905	\$3,200			
> 24.384 <u><</u> 30.480	> 80 <u><</u> 100	\$3,850	\$4,235	\$4,660			
> 30.480	>100	\$5,000	\$5,500	\$6,000			

P	ro	posed	tolls	for	small	vessels

12. Proposed tolls adjustments for vessels that are charged by displacement

Displacement	Effective	Effective	Effective
	January 1,	January 1,	January 1,
	2023	2024	2025
Per displacement ton	\$5.00	\$5.25	\$5.50

Proposed tolls adjustments for vessels that are charged by displacement

13. Proposed adjustments to the structure of the intra-maritime cluster

An adjustment is proposed in the tariff table for small vessels pertaining to the Marine Bunkering Market, for the purpose of unifying its structure or length overall range to the small vessel structure. No tariff adjustments are proposed for this segment.

The structure of and tariffs of the marine bunkering market will be as follow:

Proposed length		Current tolls
Meters Feet		
< 19.812	<65	\$800
<u>></u> 19.812 <u><</u> 24.384	<u>></u> 65 <u><</u> 80	\$1,300
> 24.384 <u><</u> 30.480	> 80 <u><</u> 100	\$2,000
> 30.480	>100	\$3,200

Proposed structure for the Marine Bunkering Market Segment

IV. IMPLEMENTATION

For all market segments, proposed adjustments and modifications will become effective on January 1, 2023. Also, further proposed adjustments and modifications are scheduled to become effective on January 1, 2024 and January 1, 2025, as indicated on tables from Section III of this document.

This English translation is intended solely for the purpose of facilitating an overall understanding of the content of the original Spanish version. In those cases where differences may be found between the two, the Spanish document must be considered as the official version.

AGREEMENT No. 397 (of March 24th, 2022)

"Whereby the proposal to modify the Panama Canal Tolls system and the rules of admeasurement for the use of the Panama Canal is approved"

THE BOARD OF DIRECTORS OF THE PANAMA CANAL AUTHORITY

WHEREAS:

The Board of Directors of the Panama Canal Authority is responsible for establishing the tolls, rates and fees for the use of the Canal and related services, subject to final approval of the Cabinet Council, in accordance with article 319 (2) of the Political Constitution of the Republic of Panama, and article 18 (3) of the Panama Canal Authority Organic Law (No. 19 of June 11, 1997).

The Panama Canal Authority Administration has submitted for consideration of the Board of Directors a proposal to modify the Panama Canal tolls system and the rules of admeasurement of vessels for the use of the Panama Canal, which is part of this Agreement.

The proposal for modification submitted by the Administration contains a justification of the reasons and factors taken into consideration for its formulation, in accordance with the provisions of the Panama Canal Authority Agreements issued by the Board of Directors for this purpose:

- Agreement No. 3 of November 12, 1998, which regulates the Procedure to Revise the Panama Canal Tolls Rates and Rules of Admeasurement, modified by Agreement No. 127 of January 19, 2007.
- Agreement No. 4 of January 7, 1999, which regulates the Establishment of Tolls, Rates and Fees for the Transit of Vessels through the Canal, and the Rendering of Related Services and Complementary Activities, modified by Agreements No. 58 of August 16, 2002, No. 94 of March 30, 2005, No. 141 of June 21, 2007, No. 220 of November 25, 2010, No. 269 of October 30, 2014, No. 295 of May 26, 2016, No. 316 of September 28, 2017, No. 359 of December 12, 2019, No. 382 of April 22, 2021, and No. 394 of January 20, 2022.
- Agreement No. 395 of January 20, 2022, which subrogates the Regulation for the Admeasurement of Vessels to Assess Tolls for Use of the Panama Canal.

Article 79 of the Organic Law states that the Panama Canal Authority shall give interested parties an opportunity to participate in the consultation processes for the purpose of revising tolls and admeasurement rules by submitting, in writing, data, opinions, or arguments, and participating in a public hearing to be held at least 30 days after the date of publication of a notice in the official publication of the Panama Canal Authority in which said hearing is called.

The Board of Directors of the Panama Canal Authority agrees with the contents of the submitted modification proposal and considers that it should be processed appropriately pursuant to the Organic Law and applicable Regulations.

AGREES:

<u>ARTICLE ONE</u>: To approve the proposal to modify the Panama Canal Tolls System and the rules of admeasurement of vessels for the use of the Panama Canal, which is part of this Agreement, submitted by the Administration of the Panama Canal Authority.

<u>ARTICLE TWO</u>: To order the beginning of the consultation and public hearing process established by the Organic Law, through the publication in the Panama Canal Record of the notification of the proposal, in accordance with the Annex which is part of this Agreement.

<u>ARTICLE THREE</u>: To appoint the following members of the Board of Directors as members and officers of the Committee that shall conduct the consultation and the public hearing process:

Oscar Ramírez	Chairman
Ricardo M. Arango	Vice chairman
Jorge L. González	Member
Nicolás González Revilla P.	Member
Enrique Sánchez S.	Member

<u>ARTICLE FOUR</u>: To designate Ricaurte Vásquez M., Administrator of the Panama Canal Authority, as Secretary of the Committee that will conduct the consultation and public hearing process.

<u>ARTICLE FIVE</u>: This Agreement will take effect as of the date of its publication in the Panama Canal Record.

LEGAL REFERENCES: Article 319 of Political Constitution of the Republic of Panama; articles 9, 18 and 79 of Law No. 19 of June 11, 1997, Organic Law of the Panama Canal Authority; and Agreements Nos. 3, 4, 58, 94, 127, 140, 141, 182, 220, 269, 295, 316, 359, 382, 394 and 395 issued by the Board of Directors of the Panama Canal Authority.

Given in the City of Panama, on the twenty-fourth (24th) day of March, two thousand and twenty-two (2022).

TO BE PUBLISHED AND ENFORCED.

Aristides Royo Sánchez

Rossana Calvosa de Fábrega

Chairman of the Board of Directors

Secretary

This English translation is intended solely for the purpose of facilitating an overall understanding of the content of the original Spanish version. In those cases where differences may be found between the two, the Spanish document must be considered as the official version.

PROPOSAL TO MODIFY THE PANAMA CANAL TOLLS SYSTEM AND THE RULES OF ADMEASUREMENT OF VESSELS FOR THE USE OF THE PANAMA CANAL

THE BOARD OF DIRECTORS OF THE PANAMA CANAL AUTHORITY

ANNOUNCES:

1. PROPOSAL TO MODIFY THE PANAMA CANAL TOLLS SYSTEM AND THE RULES OF ADMEASUREMENT OF VESSELS FOR THE USE OF THE PANAMA CANAL.

During an ordinary meeting, the Board of Directors of the Panama Canal Authority approved Agreement No. 397 of March 24th, 2022, whereby the proposal to modify the Panama Canal tolls system and the rules of admeasurement of vessels for the use of the Panama Canal is approved, the beginning of the consultation and public hearing process established by law is ordered, the members of the Board of Directors of the Panama Canal Authority's Committee that shall conduct the consultation and public hearing are designated, and the Secretary of the aforementioned Committee is appointed.

Agreement No. 397 of March 24th, 2022, contains the proposal to modify the Panama Canal tolls system and the rules of admeasurement of vessels for the use of the Panama Canal, which will be available to the interested parties as of the date of this publication.

2. ESSENCE OF THE PROPOSED CHANGE.

The Panama Canal Authority proposes an adjustment in the tolls and structure of most of the market segments and changes to the Regulation for the Admeasurement of Vessels to Assess Tolls for the Use of the Panama Canal.

2.1 The words, expressions and acronyms used in this proposal will have the following definitions:

Neopanamax vessel. Vessel with beam greater than 107 feet (32.61 meters) and/or length overall greater than 966 feet (294.44 meters). For tolls assessment purposes, vessels transiting with tropical freshwater draft of 39'09" (12.12 meters) or greater, and vessels which due to a condition or deficiency require transit through de neopanamax locks, will be considered as neopanamax vessels.

Regular vessel. Vessel with beam less than 91 feet (27.74 meters).

Super vessel. Vessel with beam equal to or greater than 91 feet (27.74 meters).

Tolls assessment to vessels in ballast condition. Percentage of the regular laden toll charge.

Vessel in ballast condition. Vessel which transits the Panama Canal without passengers or cargo, in compliance with the conditions stated in article 25 of Regulation for the Admeasurement of Vessels to Assess Tolls for the Use of the Panama Canal.

Capacity tariff. Tariff assessed for the vessel's cargo capacity, as determined by the admeasurement performed by the Panama Canal.

Fixed tariff. Fixed amount charged per transit.

TEU reefer. Specialized 20-foot container, also known as "reefer," with its own refrigeration system connected to the vessel's power supply.

TEU dry. A 20-foot container with commercial cargo.

TEU empty. Any 20-foot container without commercial cargo.

TTA. Total TEU capacity, referring to the total TEU allowed in a vessel.

TTE. Total empty TEU.

TTL. Total TEU with cargo.

2.2. The Panama Canal Authority proposes the modification of the tolls system and the establishment of simplified structures (see tables referring to each segment). These adjustments take into consideration the value of the route, which includes voyage time savings, vessel operating costs, existing transportation alternatives and the impact of the Canal transit costs on the transported commodities. This proposal also takes into consideration, the competitive position of the Panama Canal, its users and their merchant fleets, their different geographical areas and economies. Therefore, it has been concluded that the proposed adjustments are reasonable in accordance with the reality of today's maritime industry and considering the extensive implementation horizon.

The proposed adjustments are as follow:

Replacement of pricing bands with fixed and capacity tariffs:

A feature of the existing toll structure is the use of pricing bands, which apply different tariffs to each additional vessel capacity level. The disadvantage of this approach is that the lower-level bands apply to all vessels regardless of their size, which does not allow setting tolls in accordance with the value provided for each type and size of vessel.

The Panama Canal Authority proposes a more uniform and simplified structure which will eliminate pricing bands and introduce single tariffs according to locks utilized and the type and size of vessel. The proposed structure is based on two main components:

- 1. A fixed tariff per transit, in accordance with the locks utilized and the vessel size category (regular, super or neopanamax). For certain vessel types and sizes, these categories are further divided in order for the tariffs to reflect the value the Canal provides to its clients.
- 2. A capacity tariff by vessel type, size category and billing unit, which reflects the value of the service provided by the Canal to each market segment and size category.

Tariff adjustments for vessels in ballast

The current toll structure contains multiple tariff items for vessels transiting in ballast. These ballast transits differ by vessel size and type in a way that is not consistent with the value provided to the client, which increases the complexity.

The proposed tolls for vessels transiting in ballast contemplates the assessment of a percentage of the regular tolls, regardless of market segment. The assessment of tolls for vessels in ballast will be in accordance with the conditions stated in article 25 of the Regulation for the Admeasurement of Vessels to Assess Tolls for the Use of the Panama Canal.

Special tariffs for return trips

The proposal includes the elimination of special discounted tariffs for return trips for container vessels and liquified natural gas (LNG) vessels.

Announcements of future tolls adjustments

Through this notification, the Panama Canal Authority announces annual tolls adjustments until the year 2025. Fort periods beyond this proposal, each announcement will be preceded by consultation with clients in accordance with the Organic Law of the Panama Canal Authority which intends to provide a level of short to medium term predictability.

Following are the details of the proposed adjustments for each market segment for the years 2023 to 2025:

Proposed adjustments for the container vessels segment:

- 1. A fixed tariff per transit is introduced, which depends on the locks utilized and the vessel size category (regular, super or neopanamax). Neopanamax vessels are further differentiated in vessels of less than 10,000 TEU of capacity, and vessels equal or greater than 10,000 TEU of TTA capacity to reflect the value provided by the Canal to these clients.
- 2. The TEU is maintained as the unit of measurement for the calculation of tolls.
- 3. The current pricing bands are replaced with capacity tariffs by vessel size category (regular, super or neopanamax) based on the total TEU allowed (TTA), which is intrinsically related to the value that the Canal provides to each market segment and size category.

- 4. Tariffs of loaded TEU (TTL) are maintained; a new tariff that recognizes the repositioning value of empty containers is introduced (TTE); and the return voyage tariff for loaded containers (TTLR) is eliminated.
- 5. The loyalty program is simplified by reducing its six loyalty categories to one, replacing the use of tariffs by category with a percentage applied to the tolls, applicable to clients that accumulate more than 1.5 million TEU capacity (TTA) per year. This is a level equivalent to the category "1" of the current loyalty program.
- 6. Starting January 1, 2023, the loyalty category will be determined based on the accumulated volume of maximum TEU capacity registered for Canal transits during 12 consecutive months, similar to the current calculation.
- 7. Starting January 1, 2023, clients deploying more than 1.5 million TEU capacity (TTA) per year, will pay 95% of their regular tolls; starting January 1, 2024, such clients will pay 97.5% of their regular tolls.
- 8. Starting January 1, 2025, the loyalty program will be eliminated.
- 9. The calculation of allowed containers on deck will be adjusted to a visibility condition of 2 ship lengths, which will also result in the adjustment of the calculation of total TEU allowed (TTA).

	Effective January 1, 2023			E	Effective January 1, 2024			Effective January 1, 2025				
Container		Capacity	Loaded	Empty		Capacity	Loaded	Empty		Capacity	Loaded	Empty
container	Fixed Tariff	TTA (per	TTL (per	TTE (per	Fixed Tariff	TTA (per	TTL (per	TTE (per	Fixed Tariff	TTA (per	TTL (per	TTE (per
	(per transit)	TEU)	TEU)	TEU)	(per transit)	TEU)	TEU)	TEU)	(per transit)	TEU)	TEU)	TEU)
Regular	\$60,000	\$40.00	\$30.00	\$5.00	\$60,000	\$40.00	\$32.50	\$6.50	\$60,000	\$40.00	\$35.00	\$8.00
Super	\$100,000	\$40.00	\$30.00	\$5.00	\$100,000	\$40.00	\$32.50	\$6.50	\$100,000	\$40.00	\$35.00	\$8.00
Neo TEU < 10,000	\$200,000	\$30.00	\$30.00	\$5.00	\$200,000	\$30.00	\$32.50	\$6.50	\$200,000	\$30.00	\$35.00	\$8.00
Neo TEU ≥ 10,000	\$300,000	\$30.00	\$40.00	\$5.00	\$300,000	\$30.00	\$42.50	\$6.50	\$300,000	\$30.00	\$45.00	\$8.00

Proposed tolls for container vessels

On board TEU applicable to vessels which are not container vessels that transport containers on deck:

On deck TEU tariffs are adjusted for vessels other than container vessels.

On deck TEU on vessels other than container vessels	Effective January 1, 2023	Effective January 1, 2024	Effective January 1, 2025
TEU reefer	\$110.00	\$115.00	\$120.00
TEU dry	\$100.00	\$105.00	\$110.00
TEU empty	\$60.00	\$65.00	\$70.00

The calculation of tolls for vessels in ballast, applying 90% to their laden tolls, will only apply to the components of fixed and capacity tariffs. This calculation will not apply to the tariffs of TEU reefer, TEU dry nor TEU empty on deck which vessels in ballast might transport.

Proposed adjustments to the tolls of Vehicle Carriers/RoRo:

The proposed adjustments to the tolls of vehicle carriers/RoRo are the following:

- 1. A fixed tariff per transit is introduced which depends on the locks utilized and the vessel size category (regular, super or neopanamax).
- 2. The PC/UMS ton is maintained as the capacity measurement unit for the calculation of tolls.
- 3. A capacity tariff is established according to the vessel size category (regular, super or neopanamax) based on its PC/UMS tons of capacity.
- 4. The tolls for vessels in ballast will be 90% of the laden toll.
- 5. The use of the concept of utilization percentage of the structure (metric tons divided by dead weight) is eliminated.

	Effective January 1, 2023		Effective Jan	uary 1, 2024	Effective January 1, 2025	
Vehicle Carriers/RoRo	Fixed Fee (per transit)	Capacity Tariff (PC/UMS)	Fixed Fee (per transit)	Capacity Tariff (PC/UMS)	Fixed Fee (per transit)	Capacity Tariff (PC/UMS)
Regular	\$60,000	\$2.00	\$60,000	\$4.00	\$60,000	\$6.00
Super	\$100,000	\$3.40	\$100,000	\$4.10	\$100,000	\$4.75
Neopanamax	\$300,000	\$2.00	\$300,000	\$2.50	\$300,000	\$2.75

Proposed tolls for vehicle carriers/RoRo

Proposed adjustments to the tolls of passenger vessels:

The proposed adjustments to the tolls of passenger vessels are as the following:

- 1. A fixed tariff per transit is introduced which depends on the locks utilized and the vessel size category (regular, super or neopanamax).
- 2. The PC/UMS ton is maintained as the capacity measurement unit for the calculation of tolls.
- 3. Separate tariffs are established for regular vessels of less than 10,000 PC/UMS tons and for those equal to or greater than 10,000 PC/UMS capacity tons.
- 4. A capacity tariff is established according to the vessel size category (regular, super or neopanamax) based on its PC/UMS tons of capacity.
- 5. The tolls for vessels in ballast will be 90% of the laden toll.

	-		1 8			
	Effective January 1, 2023		Effective Jan	uary 1, 2024	Effective January 1, 2025	
Passengers	Fixed Fee (per transit)	Capacity Tariff (PC/UMS)	Fixed Fee (per transit)	Capacity Tariff (PC/UMS)	Fixed Fee (per transit)	Capacity Tariff (PC/UMS)
Regular < 10,000 CP/SUAB	\$25,000	\$2.15	\$25,000	\$3.20	\$25,000	\$4.25
Regular ≥ 10,000 CP/SUAB	\$60,000	\$2.60	\$60,000	\$3.80	\$60,000	\$5.00
Super	\$100,000	\$4.75	\$100,000	\$5.15	\$100,000	\$5.50
Neopanamax	\$300,000	\$3.75	\$300,000	\$4.65	\$300,000	\$5.50

Proposed tolls f	or passenger vessels
------------------	----------------------

Proposed adjustments to the tolls of tanker vessels:

The proposed adjustments to the tolls of tanker vessels are the following:

- 1. A fixed tariff per transit is introduced which depends on the locks utilized and the vessel size category (regular, super or neopanamax).
- 2. The PC/UMS ton is maintained as the capacity measurement unit for the calculation of tolls.
- 3. A capacity tariff is established according to the vessel size category (regular, super or neopanamax) based on its PC/UMS tons of capacity.
- 4. The metric tons of cargo tariff for laden neopanamax vessels is eliminated.
- 5. The tolls for vessels in ballast will be 90% of the laden toll.

	Effective January 1, 2023		Effective Jan	uary 1, 2024	Effective January 1, 2025	
Tankers	Fixed Fee (per transit)	Capacity Tariff (PC/UMS)	Fixed Fee (per transit)	Capacity Tariff (PC/UMS)	Fixed Fee (per transit)	Capacity Tariff (PC/UMS)
Regular	\$60,000	\$2.50	\$60,000	\$4.25	\$60,000	\$6.00
Super	\$100,000	\$3.15	\$100,000	\$4.10	\$100,000	\$5.25
Neopanamax	\$300,000	\$1.30	\$300,000	\$2.25	\$300,000	\$3.25

Proposed tolls for tanker vessels

Proposed adjustments to the tolls of chemical carriers:

The proposed adjustments to the tolls of chemical carriers are the following:

- 1. A fixed tariff per transit is introduced which depends on the locks utilized and the vessel size category (regular, super or neopanamax).
- 2. The PC/UMS ton is maintained as the capacity measurement unit for the calculation of tolls.
- 3. A capacity tariff is established according to the vessel size category (regular, super or neopanamax) based on its PC/UMS tons of capacity.
- 4. The tolls for vessels in ballast will be 90% of the laden toll.

	Effective January 1, 2023		Effective Jan	uary 1, 2024	Effective January 1, 2025	
Chemical Carriers	Fixed Fee (per transit)	Capacity Tariff (PC/UMS)	Fixed Fee (per transit)	Capacity Tariff (PC/UMS)	Fixed Fee (per transit)	Capacity Tariff (PC/UMS)
Regular	\$60,000	\$4.45	\$60,000	\$5.00	\$60,000	\$5.50
Super	\$100,000	\$3.00	\$100,000	\$4.00	\$100,000	\$5.25
Neopanamax	\$300,000	\$1.30	\$300,000	\$2.25	\$300,000	\$3.25

Proposed tolls for chemical carriers

Proposed adjustments to the tolls of liquefied petroleum gas carriers (LPG):

The proposed adjustments to LPG tolls are the following:

- 1. A fixed tariff per transit is introduced which depends on the locks utilized and the vessel size category (regular, super or neopanamax).
- 2. The cubic meter (m³) is maintained as the capacity measurement unit for the calculation of tolls.
- 3. A capacity tariff is established according to the vessel size category (regular, super or

neopanamax), based on the cubic meters (m³) of capacity.

4. The tolls for vessels in ballast will be 90% of the laden toll and will apply to vessels which transit with a maximum cargo of 2% of the total cubic meter (m^3) of cargo capacity.

	Effective Ja	Effective January 1, 2023		uary 1, 2024	Effective January 1, 2025	
LPG	Fixed Fee (per transit)	Capacity tariff (m ³)	Fixed Fee (per transit)	Capacity tariff (m ³)	Fixed Fee (per transit)	Capacity tariff (m ³)
Regular	\$60,000	\$1.60	\$60,000	\$2.55	\$60,000	\$3.50
Super	\$100,000	\$2.75	\$100,000	\$3.25	\$100,000	\$3.85
Neopanamax	\$300,000	\$0.90	\$300,000	\$1.85	\$300,000	\$2.75

Proposed tolls for LPG vessels

Proposed adjustments to the tolls of liquefied natural gas carriers (LNG):

The proposed adjustments to the LNG tolls are the following:

- 1. A fixed tariff per transit is introduced which depends on the locks utilized and the vessel size category (regular, super or neopanamax).
- 2. The cubic meter (m^3) is maintained as the capacity measurement unit for the calculation of tolls.
- 3. A capacity tariff is established according to the vessel size category (regular, super or neopanamax), based on the cubic meters (m³) of capacity.
- 4. The tolls for vessels in ballast will be 90% of the laden toll and will apply to vessels which transit with a maximum cargo of 10% of the total cubic meter (m³) of cargo capacity.
- 5. The special ballast tariff applied in the roundtrip (return trip) instances is eliminated.

	Effective January 1, 2023		Effective Jan	uary 1, 2024	Effective January 1, 2025	
LNG	Fixed Fee (per transit)	Capacity tariff (m ³)	Fixed Fee (per transit)	Capacity tariff (m ³)	Fixed Fee (per transit)	Capacity tariff (m ³)
Regular	\$60,000	\$1.60	\$60,000	\$2.55	\$60,000	\$3.50
Super	\$100,000	\$2.75	\$100,000	\$3.25	\$100,000	\$3.85
Neopanamax	\$300,000	\$1.35	\$300,000	\$1.70	\$300,000	\$2.05

Proposed tolls for LNG vessels

Proposed adjustments to the tolls of dry bulk vessels:

The adjustments to the tolls of dry bulk vessels are the following:

- 1. A fixed tariff per transit is introduced which depends on the locks utilized and the vessel size category (regular, super or neopanamax).
- 2. The deadweight ton (DWT) is maintained as the unit of capacity measurement for the calculation of tolls.
- 3. A capacity tariff is established according to the vessel size category (regular, super or neopanamax), based on its DWT capacity.
- 4. The metric tons of cargo tariffs for laden neopanamax vessels are eliminated.
- 5. The tariff groups of four commodities (grains, coal, iron ore and other dry bulk) are consolidated into one single tariff group.

6. The tolls for vessels in ballast will be 90% of the laden toll.

	Effective Ja	Effective January 1, 2023		uary 1, 2024	Effective January 1, 2025	
Dry Bulk	Fixed Fee (per transit)	Capacity tariff (DWT)	Fixed Fee (per transit)	Capacity tariff (DWT)	Fixed Fee (per transit)	Capacity tariff (DWT)
Regular	\$60,000	\$1.00	\$60,000	\$1.25	\$60,000	\$1.65
Super	\$100,000	\$1.10	\$100,000	\$1.15	\$100,000	\$1.50
Neopanamax	\$300,000	\$0.25	\$300,000	\$0.50	\$300,000	\$0.80

Proposed tolls for dry bulk vessels

Proposed adjustments to the tolls of reefer, general cargo and other vessels:

The proposed adjustments to the tolls of reefer, general cargo and other vessels are the following:

- 1. A fixed tariff per transit is introduced which depends on the locks utilized and the vessel size category (regular, super or neopanamax).
- 2. The PC/UMS ton is maintained as the capacity measurement unit for the calculation of tolls.
- 3. In the case of reefers and general cargo regular vessels, separate tariffs are established, for vessels of less than 10,000 and for vessels equal to or greater than 10,000 PC/UMS tons of capacity.
- 4. In the case of regular vessels in the "others" segment, separate tariffs are established, for vessels of less than 7,500 and for vessels equal to or greater than 7,500 PC/UMS tons of capacity.
- 5. A capacity tariff is established according to the vessel size category (regular, super or neopanamax) based on its PC/UMS tons of capacity.
- 6. The tolls for vessels in ballast will be 90% of the laden toll.

	Effective January 1, 2023		Effective Jan	uary 1, 2024	Effective January 1, 2025	
Reefers	Fixed Fee (per transit)	Capacity Tariff (PC/UMS)	Fixed Fee (per transit)	Capacity Tariff (PC/UMS)	Fixed Fee (per transit)	Capacity Tariff (PC/UMS)
Regular < 10,000 CP/SUAB	\$25,000	\$2.25	\$25,000	\$2.75	\$25,000	\$3.50
Regular ≥ 10,000 CP/SUAB	\$60,000	\$1.40	\$60,000	\$2.35	\$60,000	\$3.25
Super	\$100,000	\$1.75	\$100,000	\$2.40	\$100,000	\$3.00
Neopanamax	\$300,000	\$0.75	\$300,000	\$1.15	\$300,000	\$1.50

Proposed tolls for reefer vessels

Proposed tolls for general cargo vessels

	Effective J	Effective January 1, 2023		uary 1, 2024	Effective January 1, 2025	
General Cargo	Fixed Fee (per transit)	Capacity Tariff (PC/UMS)	Fixed Fee (per transit)	Capacity Tariff (PC/UMS)	Fixed Fee (per transit)	Capacity Tariff (PC/UMS)
Regular < 10,000 CP/SUAB	\$25,000	\$2.75	\$25,000	\$3.15	\$25,000	\$3.50
Regualr ≥ 10,000 CP/SUAB	\$60,000	\$1.65	\$60,000	\$2.45	\$60,000	\$3.25
Super	\$100,000	\$2.00	\$100,000	\$2.50	\$100,000	\$3.00
Neopanamax	\$300,000	\$0.75	\$300,000	\$1.15	\$300,000	\$1.50

	Effective January 1, 2023		Effective Jan	uary 1, 2024	Effective January 1, 2025	
Others	Fixed Fee (per transit)	Capacity Tariff (PC/UMS)	Fixed Fee (per transit)	Capacity Tariff (PC/UMS)	Fixed Fee (per transit)	Capacity Tariff (PC/UMS)
Regular < 7,500 CP/SUAB	\$15,000	\$2.00	\$15,000	\$2.50	\$15,000	\$3.00
Regular ≥ 7,500 CP/SUAB	\$60,000	\$1.65	\$60,000	\$2.40	\$60,000	\$3.25
Super	\$100,000	\$1.50	\$100,000	\$2.25	\$100,000	\$3.00
Neopanamax	\$300,000	\$0.75	\$300,000	\$1.15	\$300,000	\$1.50

Proposed tolls for "others" vessel segment

Proposed adjustments the tolls for vessels that are charged by displacement:

The tolls of vessels that are charged by displacement are adjusted:

Displacement	Effective	Effective	Effective
	January 1,	January 1,	January 1,
	2023	2024	2025
Per displacement ton	\$5.00	\$5.25	\$5.50

Proposed adjustments to the structure of the intra-maritime cluster:

An adjustment is proposed in the distribution of the length ranges of the tariff table for small vessels pertaining to the Marine Bunkering Market, for the purpose of unifying its structure or length overall range to the small vessel structure. No tariff adjustments are proposed for this segment.

The structure of and tariffs of the marine bunkering market will be as follow:

Proposed length overall range		Current tolls	
Meters	Feet		
< 19.812	<65	\$800	
≥ 19.812 ≤ 24.384	<u>≥ 65 ≤ 80</u>	\$1,300	
> 24.384 < 30.480	> 80 <u><</u> 100	\$2,000	
> 30.480	>100	\$3,200	

Proposed structure for the Marine Bunkering Market Segment

Proposed adjustments to small vessels tolls:

The proposed modifications to small vessel tolls involve adjustments to the maximum limits of displacement tonnage established by tolls based on length overall, as follows:

- 1. These tolls apply to all small vessels (length overall up to 125 feet).
- 2. Vessels of length overall greater than 125 feet, of any market segment, with PC/UMS tonnage up to 999 as the maximum limit, will be applied the small vessels tolls in the length overall range greater than 100 feet, in addition to all related charges for other maritime services.
- 3. The proposed modifications to small vessel tolls involve adjustments to the maximum limits of displacement tonnage established by tolls based on length overall (1,000 displacement tons). Vessels with a displacement tonnage greater than 1,000 will be assessed tolls based on the proposed displacement tolls.

Length over	erall range	Proposed Small Vessels Tolls		Tolls
Meters	Feet	Effective January 1, 2023	Effective January 1, 2024	Effective January 1, 2025
< 19.812	< 65	\$1,760	\$1,935	\$2,130
<u>></u> 19.812 ≤ 24.384	<u>> 65 < 80</u>	\$2,640	\$2,905	\$3,200
> 24.384 < 30.480	> 80 <u><</u> 100	\$3,850	\$4,235	\$4,660
> 30.480	>100	\$5,000	\$5,500	\$6,000

Proposed tolls for small vessels

2.3 Proposed adjustments to the Regulation for the Admeasurement of Vessels to Assess Tolls for the Use of the Panama Canal

The proposal contemplates the elimination of the return portion tariff for laden container vessels (TTLR) and the adjustment of the calculation of the containers allowed on deck based on visibility conditions of 2 ship lengths, which will lead to the adjustment of the calculation of total TEU allowed (TTA). The proposed changes would be implemented by a subsequent modification of the Regulation for the Admeasurement of Vessels to Assess Tolls for the Use of the Panama Canal, once the proposal is approved.

The following articles will be modified:

- Article 2, definitions: eliminate the TTLR, add TTE and modify the visibility condition from one to 2 ship lengths.
- Article 10: eliminate the TTLR acronym and add the TTE acronym.

3. IMPLEMENTATION OF PROPOSED CHANGES.

For all market segments, the adjustments will be effective on January 1, 2023, January 1, 2024, and January 1, 2025.

4. INVITATION TO PARTICIPATE IN THE CONSULTATION AND PUBLIC HEARING.

Interested parties are invited to participate in the consultation and public hearing of the proposal to modify the Panama Canal tolls system and the rules of admeasurement of vessels for the use of the Panama Canal, as follows:

- **4.1. Public consultation:** There will be a public consultation period that will begin on the date of the publication of this notification and will expire on May 17, 2022, at 4:15 p.m., local time.
- **4.2. Public hearing:** A public hearing will be held on May 20, 2022, as indicated in paragraph 7 of this notification.

5. FORM OF PARTICIPATION OF THE INTERESTED PARTIES.

The interested parties may participate in the consultation period and public hearing in accordance with the following rules:

- **5.1.** As of the publication date of this notification, the consultation period is open, and the interested parties may present data, opinions, and statements in writing, in English or Spanish, which must be received by the Panama Canal Authority before the deadline of May 17, 2022, at 4:15 p.m., local time.
- **5.2.** All who have participated in the consultation process described above in paragraphs 4.1 and 5.1 may participate in the public hearing, to be held on the date indicated in paragraph 4.2, directly or through their duly accredited representatives, provided that they have announced in writing, during the consultation period, their decision to participate in the hearing as a speaker. This announcement to participate as a speaker must be sent to the addresses indicated in paragraph 6.4 of this notification and shall contain the name and address of the interested party and the capacity under which he/she shall present himself/herself. The announcement of participation as speaker in the public hearing must be received in writing by email to the address *canaltolls@pancanal.com*, in English of Spanish, no later than May 17, 2022, at 4:15 p.m., local time, and the recorded date and time of receipt of notification shall determine the order in which the interested party shall intervene in the public hearing.

6. REQUEST AND FORWARDING OF INFORMATION.

- **6.1.** Persons interested in obtaining a copy of the proposal may download an electronic copy, both in Spanish and English, accessing the following link: <u>www.pancanal.com/peajes.</u>
- **6.2.** Those interested in expressing their comments, opinions, arguments, or supply information that support said comments during the consultation period, shall submit them in writing by email to the address *canaltolls@pancanal.com*, in English or Spanish, before the date and time indicated in paragraph 4.1 of this notification.
- **6.3.** Those interested in participating in the public hearing as speakers must announce their decision in writing by email to the address <u>canaltolls@pancanal.com</u>, in English or Spanish, before the date and time indicated in paragraph 4.1 of this notification. Information, letters, or any intent to participate in the consultation period and/or public hearing as speaker mentioned in paragraphs 6.2 and 6.3 above sent via email, shall be submitted in "pdf", "jpeg" or "png" format. Letters or information in the body of the email or submitted in other formats will not be considered.

Similarly, for each electronic correspondence with information, letters, or notifications of participation in the public consultation and / or public hearing mentioned in paragraphs 6.2 and 6.3 above, the Panama Canal Authority will issue an electronic acknowledgment of receipt or response by email to confirm receipt of such information, letter, or notification of participation. If you do not receive a confirmation within two days of the date the correspondence was sent, please resend your message to the address *canaltolls@pancanal.com*.

Also, those interested in participating in the public hearing as speakers are requested to send a copy of the content of their presentation, if possible, in advance of the date of the public hearing indicated in paragraph 4.2 of this notification, through email to the address *canaltolls@pancanal.com*.

6.4. The electronic address (e-mail) to send the documentation indicated in paragraphs 4, 5 and 6 of this notification:

Email: canaltolls@pancanal.com

7. PLACE, DATE AND TIME OF THE PUBLIC HEARING.

- **7.1.** The public hearing shall be held in the Managerial Wing of the "Ascanio Arosemena", Complex, Balboa, Republic of Panama, on Friday, May 20, 2022, and will begin at 9:00 a.m. local time.
- **7.2.** The public hearing will be held in person for those who have announced in writing their decision to participate as speakers in accordance with paragraphs 5.2 and 6.3 of this notification. Additional instructions and other logistical details will be distributed in a timely manner to those who have notified in writing their decision to participate in the public hearing as speakers.
- **7.3.** Those interested in participating in the public hearing as listeners may request the respective link and instructions for access to the email *canaltolls@pancanal.com*, no later than the day indicated in paragraph 4.1 of this notification, as the end of the public consultation period. Listeners are understood to be those who are not in the site of the hearing. Listeners will not present comments during the public hearing.
- **7.4.** The "hybrid" format of the public hearing (in person for presenters and not-on-site for listeners by means of a link and access instructions) presented in this notification is based on compliance with the biosecurity measures implemented due to the COVID-19 pandemic in effect in the Republic of Panama at the date of the public hearing.

8. PUBLIC HEARING PROCEDURE.

The Board of Directors of the Panama Canal Authority has designated the following Board members as members and officers of the Committee that shall conduct the consultation and public hearing process (hereinafter referred to as the Committee):

Oscar Ramírez	Chairman
Ricardo M. Arango	Vice chairman
Jorge L. González	Member
Nicolás González Revilla P.	Member
Enrique Sánchez S.	Member

The Board of Directors of the Panama Canal Authority has appointed Ricaurte Vásquez M., Administrator of the Panama Canal Authority, as Secretary of the Committee.

- **8.1.** The Committee shall examine all the information that has been properly and timely presented, relative to the comments, data and information provided by the interested parties during the consultation period.
- **8.2.** The Committee shall commence the public hearing at the place, date and time indicated in this notification. The Chairman of the Committee shall inform the participants that the purpose of the public hearing is to listen to the arguments in favor or against the proposal.
- **8.3.** The Chairman of the Committee shall announce the order of participation of each speaker, in accordance with the provisions of paragraph 5.2 of this notification, and each one shall begin his/her presentation in that order.
- **8.4.** Participants as speakers in the public hearing shall be called upon individually to orally make their statements and express their points of view on the proposal, for a maximum of five minutes. The Committee shall analyze and decide on the appropriateness of extending this period of time as it deems convenient, on a case-by-case basis, and shall inform the participants of its decision. Presentations with visual aid, slides, "PowerPoint" or any other devices shall not be allowed.
- **8.5.** The purpose of individual participation is merely expository; therefore, no debates or questions and answers shall be admitted between the members of the Committee and the participants, or between participants.
- **8.6.** The members of the Committee shall receive the testimony or statements of the interested parties in relation to the proposed modification. If possible, speakers are requested to send a copy of the content of their presentation, via email to *canaltolls@pancanal.com*
- **8.7.** After the public hearing, the Committee shall analyze the documentation presented during the consultation period, and the presentations of the participants during the public hearing and shall submit a report to the Board of Directors of the Panama Canal Authority, within a reasonable time period, of the proceedings and the pertinent recommendations.

PANAMA, REPUBLIC OF PANAMA, MARCH TWENTY FOUR (24), TWO THOUSAND AND TWENTY-TWO (2022).

ANNEX B. LEGAL REFERENCES

The applicable legal regime that governs the Panama Canal tolls and rules of admeasurement is found in Title XIV of the Political Constitution of the Republic of Panama, in accordance with the Treaty Concerning the Permanent Neutrality and Operation of the Panama Canal, Organic Law No. 19 of June 11, 1997, whereby the Panama Canal Authority is organized, and its Regulations issued by the Panama Canal Authority Board of Directors.

Political Constitution of the Republic of Panama <u>Title XIV</u>

Article 316. An autonomous juridical entity under Public Law is hereby created with the name of the Panama Canal Authority, which shall have the exclusive administration, operation, conservation, maintenance and modernization of the Panama Canal and its pertinent activities, pursuant to constitutional and legal provisions, in order to operate in a safe, continuous, efficient and profitable manner. It shall have its own patrimony and the right to administer it.

Article 319. The board of directors shall have the following powers and duties, without prejudice to any other as determined by the Constitution and the Law:

... 2 G

2. Set tolls, charges, and fees for the use of the Canal and its related services, subject to final approval by the Cabinet Council.

•••

Article 321. The Panama Canal Authority shall make annual payments to the Panama National Treasury per Panama Canal net ton or its equivalent, from the monies collected from vessels transiting the Panama Canal, which are subject to the payment of tolls. The rates for these payments shall be set by the Panama Canal Authority and shall not be less than those paid to the Republic of Panama for the same concept on December 31, 1999. By reason of their transit through the Panama Canal, vessels, their cargo, passengers, owners or operators, or their operation, as well as the Panama Canal Authority may not be subject to any other national or municipal tax.

Article 323. The regime contained in this Title may only be developed by Laws establishing general norms. The Panama Canal Authority may regulate these subjects and will provide copy of all the regulations issued in the exercise of this faculty to the Legislative Branch in a term no later than fifteen calendar days.

Treaty Concerning the Permanent Neutrality and Operation of the Panama Canal

The treaty pertaining to the Permanent Neutrality of the Canal and the Operation of the Panama Canal, establishes in article III, numeral 1, point c, that tolls and other charges for transit and

ancillary services will be fair, reasonable and equitable and consistent with the principles of International Law.

Law No. 19 of June 11, 1997 "Whereby the Panama Canal Authority is Organized"

Article 9. The Authority shall set the tolls to be charged for use of the Canal, fees, and rates for services rendered, as well as the rules for the admeasurement of ships which will be in force in the Canal, in accordance with the National Constitution, this Law, and the Regulations.

Article 18. In addition to the authority assigned by the National Constitution, the Board of Directors shall exercise the following functions:

•••

. . .

2. Determine, upon previous consultation with the Administrator, the vessel admeasurement system to be used by the Canal.

3. Set the tolls, rates, and fees for use of the Canal and related services, subject to final approval of the Cabinet Council.

5. Approve, pursuant to the authority granted by the pertinent general provisions established in this Law, the necessary or appropriate regulations for the proper operation, and modernization of the Canal, including the following:

e. Regulations applicable to the admeasurement of vessels, Canal navigation, marine traffic control, vessel pilotage, the procedure for investigation of accidents, the formulation and recognition of claims arising from accidents in the Canal, and other matters related to Canal navigation.

•••

. . .

k. Regulations to set tolls, rates, and fees charged by the Authority and its concessionaires for the transit of vessels through the Canal, and the rendering of related services.

•••

Article 21. The Chairman of the Board of Directors shall exercise the following functions:

•••

5. Submit and justify to the Cabinet Council the revision of tolls, fees, and rates charged by the Authority and its concessionaires for the rendering of services. In these instances he shall be accompanied by the Administrator, who shall have a right to be heard.

•••

Article 25. The Administrator shall have the following functions and duties:

•••

6. Draft the regulations for the proper operation and adequate modernization of the Canal and submit them for consideration and approval by the Board of Directors.

•••

10. Reply to any inquiry made by the Board of Directors regarding the setting of tolls, fees, and rates for Canal transit and related services rendered by the Authority.

Article 39. The Authority shall pay annually to the National Treasury fees per Panama Canal net ton, or its equivalent, collected from ships transiting the Canal, subject to the payment of tolls. These fees, as well as others it must pay, shall be set by the Authority and may not be less than those the Republic of Panama must receive for the same items as of December 31, 1999.

Article 75. Tolls shall be set at rates estimated to cover the costs of operation and modernization of the Canal, and will include at least:

- 1. The costs of operating the Canal, including depreciation costs, support for water resources protection, working capital, and the required reserves.
- 2. Payments to the National Treasury, as stipulated in the National Constitution and this Law, estimated according to the bases established in the regulation for this purpose.
- 3. Capital for plant replacement, expansion, improvements, and modernization of the Canal.
- 4. Interest on the assessed value of the Canal.
- 5. Losses carried over from previous years.

The tolls and rates established by the Authority shall take into consideration the conditions of safe, uninterrupted, efficient, competitive, and profitable Canal service.

Article 76. Neither the Government nor the Authority may authorize exemption from the payment of tolls, fees, or tariffs for Canal services. Notwithstanding, vessels exempted by virtue of international treaties in effect, ratified by the Republic of Panama, shall not pay tolls for transiting the Canal.

Article 77. All Canal users subject to tolls, fees, and tariffs shall make the payment in cash, in the legal currency of the Republic of Panama or the currency established by the Authority before the service requested is rendered, in an amount equivalent to the cost of the service.

The above-mentioned payment may be substituted by a surety posted by a bank that meets the requirements of the Authority for such purpose.

Article 78. The Authority may require, as a previous condition for transit, that vessels clearly establish the financial responsibility and guarantees for payment of a reasonable and adequate amount, consistent with the rules of international practice, to cover any damages that may result from their transit through the Canal.

In the case of a government-owned or government-operated vessel, or for which the government of a country has accepted responsibility, it shall suffice to guarantee such financial responsibility by means of a certification by the respective country stating that it

shall comply with its obligations, in accordance with International Law, to pay any damages arising from actions or omissions of such ships during their passage through the Canal.

The exception set forth in the previous paragraph will not be applicable when the vessel, property of a State or operated by the same, is engaged in maritime trade.

Article 79. The Authority shall give interested parties an opportunity to participate in the consultation processes for the purpose of revising tolls and admeasurement rules by submitting, in writing, data, opinions, or arguments, and participating in a public hearing to be held at least 30 days after the date of publication of a notice in the official publication of the Authority in which said hearing is called.

Article 80. The fees and rates established for the rendering of other services will take into consideration at least the corresponding cost of such services, as determined by the Regulations.

Article 124. The Authority shall publish an official bulletin to announce the measures it has adopted. It shall include:

- 1. The Regulations.
- 2. The changes suggested for the tolls rates or the admeasurement system referenced in Article 9 of this Law.

Regulation on the Procedure to Revise the Panama Canal Tolls Rate and Admeasurement <u>Rules</u> (Approved by the Board of Directors of the Panama Canal Authority by Agreement No.3 of November 12, 1998; modified by Agreement No.127 of January 19, 2007).

Article 1. Modifications to the Panama Canal admeasurement rules and the tolls rate shall be subject to a previous consultation and public hearing process, pursuant to this regulation.

Article 2. The proposal to revise [the tolls rate and the admeasurement rules] shall be opened to public consultation, and all interested parties may participate. Any proposal must be explained,
with the inclusion of all the factors that would have been object of the revision by the Authority, for the effects of its issuance.

Article 3. The Authority shall make an official announcement of the proposal by means of its publication in the Panama Canal Register, with at least thirty (30) days in anticipation of the date of the public hearing.

Article 4. This Announcement shall contain:

1. The essence of the proposed change;

2. The date, place and procedures for receiving information and opinions, and participation in the hearing;

3. The date in which the interested parties must submit their notice of attendance to the public hearing.

Article 5. Following publication of the announcement, the Authority shall make available to the public the explained proposal referred to in Article 2 of this regulation.

Article 6. The Board of Directors shall designate a minimum of three of its members to form part of the Committee that shall conduct the process of consultation and hearings, and shall appoint one of its members to chair this Committee.

Article 7. The Committee shall apply this regulation, and its functions shall include the following: 1. Conduct the process of consultation and hearings;

2. Request or receive opinions, presentations or additional information;

3. Decide on procedural or similar matters;

4. Dispense with any irrelevant, immaterial, or excessively repetitive material expounded by the parties;

5. Dispense with any participant whose behavior interferes with the process of the hearing;

6. The Committee should submit to the Board of Directors the complete file of its activities, with the pertinent recommendation.

Article 8. The interested parties shall have the opportunity to participate in the process of the admeasurement rules and tolls rate revision by submitting information, opinions, or statements in writing to the Chairman of the Committee, within the time limits established in the announcement.

The opinions, information and oral expositions that this regulation refers to may be in Spanish or English.

Article 9. The interested parties that have participated in the process of consultation shall also have the opportunity to participate in the public hearing. The hearing shall be held on the date and place prescribed by the announcement, and the parties in attendance may present additional information in writing on any material they have already incorporated, as well as make any statements or oral presentations concerning the admeasurement rules or the tolls rate, as appropriate.

Article 10. The hearing may be attended by the interested parties in person or by their representatives. They must give notice of their attendance in writing to the Chairman of the Committee within the time limits prescribed in the announcement of the hearing, and they must include the following information:

The names and addresses of the parties, and the condition under which they attend.
The place where they wish to make their presentation, if the hearings are scheduled to be held in more than one place.

Article 11. After considering the Committee's conclusions and recommendations, the Authority shall analyze the proposed admeasurement rules or tolls rate, as appropriate. However, in the case of tolls, if the rates proposed during the analysis are higher than the original proposal, the process shall be repeated. This requirement shall apply to any subsequent revision in which higher rates than those contemplated in the previous proposal are proposed.

Article 11a. Notwithstanding the dispositions of Article 11, in the case of proposals to revise tolls rates to be implemented in several phases or several years, and the Authority, considering the issues raised by participants during the hearing, considers pertinent of modify its original proposals, shall proceed to make the corresponding adjustments and grant and additional consultation period of no less than 15 calendar days starting on the date of publication of the modified proposal in the Canal Register, to afford the interested parties an opportunity to submit to the Authority, in writing, data, opinions, information, or arguments, regarding said proposal.¹

Article 12. Any interested party may have access to the transcript of the presentations made in the hearing, provided they submit previous request thereto, and pay the costs established by the Authority.

Article 13. Changes to the tolls rate and admeasurement rules shall become effective on the date determined by the Board of Directors.

<u>Regulation for the Admeasurement of Vessels to Assess Tolls for Use of the Panama Canal</u> (Approved by the Board of Directors of the Panama Canal Authority by Agreement No. 395 of January 20, 2022.

Chapter I

General Provisions and Definitions

Article 1: This regulation establishes the procedures and rules for the admeasurement of vessels, to assess the tolls to be charged by the Panama Canal Authority for the use of the Panama Canal, pursuant to its Organic Law.

¹ Article introduced by Agreement No. 127 of January 19, 2007

Article 2: The words, expressions and acronyms used in this regulation shall have the following definitions:

Appendix: Complementary rules for the determination of the Panama Canal Universal Measurement System (PC/UMS) Net Tonnage, which is an integral part of these regulations.

Tonnage by length overall: It applies to vessels that, based on their length overall and PC / UMS Net Tonnage, pay according to the established minimum rates.

Auxiliary vessel: Any vessel that is not a warship, owned or operated by a State and used, at that time, only in non-commercial government service.

Cable ship: A specialized vessel, designed and used in the laying and repair of underwater cables used in telecommunications, electric power transmission or other purposes.

Vessel capable of carrying containers on upper deck: Vessel that does not belong to the container category, but with capacity to carry containers on upper deck. The Authority shall determine whether a vessel belongs in this category or not, taking into consideration the information provided by the vessel.

Container/Break bulk vessel: A vessel specially designed to carry containers and/or break bulk cargo below deck. This type of vessel will typically have full width hatches and boxed holds for the carriage of break bulk cargo and/or containers and many are fitted with gantry cranes. This vessel has the ability to transport cargo on deck, some are designed with removable cell guides to transport containers under deck.

General cargo vessel: A vessel designed to carry general break-bulk, palletized or dry cargo (individual items such as boxes, equipment and parts). Such cargo is stowed in general holds with no specialization. It usually has multiple decks and facilities for loading and unloading cargo. This vessel has the ability to transport cargo on deck.

Dry bulk carrier vessel: A vessel designed to carry dry cargo in bulk (such as grains, coal, minerals, metals, fertilizers and wood products).

Warship: A vessel belonging to the naval forces of a State, bearing the distinctive exterior insigne of warships of its nationality, under the command of an officer duly commissioned by the Government and registered in the Naval List and operated by a crew under regular naval discipline.

Passenger vessel: A vessel whose main or principal activity is to transport passengers, subject to fixed and publicly known itineraries. Normally, this type of vessel provides accommodations for more than (12) passengers.

Liquefied Gas Carrier vessel: A cargo ship constructed or adapted and used for the carriage in ANNEX B 36

bulk of any liquified gas or other products listed in the table of the corresponding chapter of the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk or the Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IGC Code). There are two types of gas carriers: the LPGs that transport liquefied petroleum gas and the LNGs, which transport liquefied natural gas.

Fishing Vessel: A vessel designed primarily for the capture of fish and other marine species. Includes trawlers, purse seiners, shrimpers and others, dedicated to the fishing activity.

Full Container vessel: A vessel specifically designed or converted to transport containers on the upper deck and that has cell guides permanently affixed in its holds. The Authority shall determine whether a vessel belongs in this category, taking into account the information provided by the client.

Vehicle carrier vessel: A multiple deck vessel designed to carry cars and trucks whose decks are permanent or movable. The vessel is fitted with ramps which enable the vehicles to be driven on and off the ship.

Chemical tanker vessel: A vessel built or adapted to carry in bulk any liquid product listed in the corresponding chapter of the IBC Code or BC Code, as applicable.

Refrigerated Cargo vessel("Reefer"): A multi deck cargo vessel whose cargo spaces are predominantly designed for the transport of refrigerated cargo such as fruit, meat, and other food products across the sea at various temperatures. Includes cargo vessels with 80 % or more insulated cargo space.

RoRo vessel: A vessel specially designed to carry wheeled merchandise such as: trucks, trailers or containers, which are loaded and unloaded using the roll on-roll off method using tractor vehicles with various decks communicated through ramps and lifts.

Crude/Product Tanker vessel: A vessel built or adapted to carry liquid bulk cargo, mainly crude oil and petroleum products, among others.

Maximum Draft: Maximum allowable depth (in meters) to which the hull of a vessel must be immersed when fully loaded.

Cubic cargo capacity (M³): Maximum cargo capacity of a vessel expressed in cubic meters.

Maximum passenger capacity (PAX): Total number of passengers indicated in the Passenger Ship Safety Certificate and / or in the International Tonnage Certificate, whichever is greater for a passenger vessel.

Passenger Ship Safety Certificate: Safety certificate issued to all passenger ships.

International Certificate of Fitness for the Carriage of Liquefied Gases in Bulk or Certificate of Fitness for the Carriage of Liquefied Gases in Bulk: Certificate issued to all chemical carriers engaged in international voyages and complying with the relevant provisions of the IBC or IGC Code, as appropriate.

International Tonnage Certificate, 1969 (ITC 69): International Tonnage Certificate issued in accordance with the 1969 International Convention on Tonnage Measurement of Ships.

Gas Carrier Code (**GC Code**): The Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk, which is generally applicable to ships built after December 31, 1976, but before July 1, 1986.

Bulk Chemical Code (BC Code): The Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk, which is generally applicable to ships built on or after April 12, 1972, but before July 1, 1986.

International Code on Intact Stability, 2008 (2008 IS Code), The International Code on Intact Stability 2008 (2008 IS Code), presents mandatory and recommendatory stability criteria and other measures for ensuring the safe operation of ships, to minimize the risk to such ships, to the personnel on board and to the environment.

International Gas Carrier Code (IGC Code): The International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk, which is generally applicable to ships built after July 1, 1986.

International Bulk Chemical Code (IBC Code): The International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk, which is generally applicable to ships built after July 1, 1986.

Upper Deck: The uppermost deck exposed to weather and sea, equipped with permanent means of weathertight closing of all openings in the weather part thereof, and below which all openings in the sides of the vessel are fitted with permanent means of watertight closing.

In a vessel having a stepped upper deck, the lowest line of the exposed deck and the continuation of that line parallel to the upper part of the deck is taken as the upper deck.

Summer displacement: This is the total weight of the vessel in metric tons when it is loaded to its summer draft consisting of the sum of the lightweight tonnage plus deadweight summer tonnage.

Lightweight tonnage (Lightship): The weight of a vessel in metric tons as the shipyard delivers it; that is, with no fuel, stores, food and crew on board.

Fully loaded displacement: The weight of the vessel in metric tons fully loaded with all stores, cargo, water, fuel, ammunitions, the weight of officers, and crew members as well as passengers, if

any, and their belongings.

Enclosed spaces. Those bounded by the vessel's hull, by fixed or portable partitions or bulkheads, by decks or coverings other than permanent or movable awnings. No break in a deck, nor any opening on the vessel's hull, in a deck or in a covering of a space, or in the partitions or bulkheads of a space, nor the absence of a partition or bulkhead, shall preclude a space from being included in the enclosed space.

Excluded spaces. Notwithstanding the definition of enclosed spaces, the spaces referred to in Part C of the Appendix, which are not included in the volume of the enclosed spaces. However, they shall be considered enclosed spaces when they meet any of the conditions stated in the first paragraph of the aforementioned Part.

Weathertight: Means that in any sea conditions water will not penetrate into the ship.

Watertight: Condition of the vessel capable of preventing the passage of water through the structure or closure in any direction under a head of water for which the surrounding structure is designed.

Breadth or moulded breadth (**MB**): The maximum breadth of the vessel, measured amidships to the moulded line of the frame in a vessel with a metal shell and to the outer surface of the hull in a vessel with a shell of any other material.

Transitional Relief Measure: Is the special treatment granted to the vessels that have made a Canal transit between March 23, 1976, and September 30, 1994 and return for transit after September 30, 1994. It consists in freezing the tonnage according to the Panama Canal Tonnage System, which was in effect up to September 30, 1994. This measure is applied to vessels as long as they have not undergone a significant structural change. This measure shall be applied to the vessels that have not been subject to a significant structural change, meaning a real variation of not less than ten percent (+/- 10%) of the total volume (V) of the ship. In the event of a significant structural change, the PC/UMS Net Tonnage shall be determined in accordance with Article 10.

The transitional relief measure shall not apply to vessels classified by the Authority as Full Container ship.

Number of TEU Carried During a Transit (NTT): Is the product of combining the various sizes and types (general, reefers or empty) of containers carried during the transit in open spaces on the upper deck of vessels that are not full container vessels and have the capacity to carry containers on the upper deck, maximizing the volumetric space, expressing such volume in TEU units according to the conversion table in Article 10. The Authority reserves the right to verify the NTT to ensure that this data complies with the accuracy standards required by the Authority.

Passenger: Every person who travels on board a vessel, other than the master, members of the

crew or other persons employed or hired for any duty necessary for the vessel.

Courtesy passenger: Person traveling on board a vessel, from whom no financial remuneration will be received or whose transportation does not represent a commercial advantage for the vessel this definition does not apply to passenger vessels.

Moulded Depth (MD): The vertical distance measured from the top of the keel to the underside of the upper deck at side, with the variations described in Part A of the Appendix of these regulations.

Universal Measurement System (UMS): The set of rules, measurements and calculations applicable for determining the gross and net tonnage, adopted in accordance with the 1969 International Convention on Tonnage Measurement of Vessels.

Panama Canal Universal Measurement System (PC/UMS): The system based on the Universal Measurement System, 1969, using its parameters for determining the total volume of a vessel with additional variations established by the Authority.

TEU (**20-foot Container**): A unit of measurement or reference equivalent to a 20-foot container whose length, width, and height measurements are 20, 8, and 8.5 feet, respectively. A TEU represents a volume equal to 1,360 cubic feet.

Total TEU Loaded during transit (TTL): Is the product of combining the various sizes of containers carried with cargo transported by full container ships, maximizing the volumetric space, expressing such volume in TEU units according to the conversion table in Article 10. The Authority reserves the right to verify the TTL to ensure that this data complies with the degree of accuracy required by the Authority.

Total TEU Loaded during transit in the return voyage (TTLR): It is the total TEU loaded during transit (TTL), applicable to a neopanamax Full Container vessel in its return voyage (south), with a utilization percentage (TTL) in the northbound transit equal to or greater than 70 percent of the total TEU allowed (TTA) at the Canal and returning in a time period not greater than 28 days. This period corresponds to the time when the vessel leaves Canal waters (sea buoy) in its northbound transit until the time of its arrival to Canal waters (sea buoy) for its southbound transit. These 28 days do not consider the time spent by vessels in anchorages and ports of the Republic of Panama that are between the official exit of the Canal (sea buoy) in the north and the official arrival (sea buoy) at the Panama Canal in the southern direction. If the vessel needs to perform port activities in Panamanian terminals located outside these points, the documentation supporting the visit must be submitted to the Authority.

Total TEU Allowance (TTA): Is the total sum of TEU allowance above and below deck.

TEU Allowance Below Deck: The total container capacity in TEU that a full container vessel is able to carry in enclosed spaces, including those that may be transported in enclosed spaces on the

upper deck. This capacity is determined by using the combination of the various sizes of the containers that maximize the volumetric space, expressing that volume in TEU units.

TEU Allowance Above Deck: The total container capacity in TEU that a vessel is able to carry in open spaces on upper deck, not including those containers that may be carried in enclosed spaces on said deck. This capacity is determined by using the combination of the various sizes of the containers that maximize the volumetric space, expressing said volume in TEU units. This volumetric space will be adjusted to a condition of visibility of one length overall, regardless of the visibility requirements established by the Authority.

Summer Deadweight Tonnage (DWT): Maximum cargo capacity of a vessel in metric tons when it is completely submerged at its summer draft. It includes the weight of cargo, fuel, lube oils, supplies, fresh water in the tanks, passengers and equipment, crew and their belongings.

Timber Summer Deadweight Tonnage (TDWT): Maximum cargo capacity of a vessel in metric tons when it is completely submerged at its timber summer draft. It includes the weight of cargo, fuel, lube oils, supplies, fresh water in the tanks, passengers and equipment, crew and their belongings.

Total volume (V): The enclosed space of the vessel, expressed in cubic meters.

Article 3: The following shall be subject to admeasurement:

- 1. The enclosed space below deck.
- 2. The enclosed spaces above deck.
- 3. The maximum capacity of the vessel to transport containers under the upper deck and on it.
- 4. Cubic cargo capacity
- 5. Summer deadweight tonnage or Timber Summer Deadweight Tonnage
- 6. Maximum displacement

Article 4: The Administrator of the Authority shall interpret and apply the rules for the admeasurement of vessels set out in this regulation.

Chapter II

Determination of the Admeasurement of Vessels to Assess Tolls for Use of the Panama Canal

First Section Requirements

Article 5: For the purpose of admeasurement, vessels transiting the Canal shall present an ITC 69 or, in its absence a substitute document deemed acceptable by the Authority, based on a system substantially similar to the one adopted by the aforementioned agreement. In addition, these vessels shall provide drawings, classification certificates and documents with information stating the V, DWT, TDWT, M³, and maximum displacement of the vessel or documentation to determine these parameters through mathematical calculations.

All chemical tankers must present, in addition to what is established in the first paragraph of this article, the International Certificate of Fitness for the Carriage of Dangerous Chemicals in Bulk or the Certificate of Fitness for the Carriage of Dangerous Chemicals in Bulk, as applicable, to determine the type of tanker (1, 2, 3 or the combination presented).

If said certificates are not obtained or if the precision guidelines acceptable to the Authority are not met, the determination of the type of chemical tanker is subject to what the Authority determines.

Vessels that, based on their length overall and PC/UMS Net Tonnage, pay according to the fixed minimum tolls and vessels subject to the transitional relief measures are exempt from the presentation of the documentation established in this article.

The transitional relief measures only apply to vessels that pay based on PC/UMS Net Tonnage.

Article 6: In addition to the requirements of the previous article, vessels with the capacity to carry containers shall provide drawings, classification certificates, and documentation with sufficient information to determine TEU allowance above and below deck, as defined in Article 2 of this Regulation.

The information to which the preceding paragraph makes reference shall be obtained from the Cargo Securing Manual (CSM), the General Arrangement Plan (GA), or any other document or official drawing which indicates the total number of containers and their measurements. In the event these documents do not comply with the standards of accuracy acceptable by the Authority, the alternate method of admeasurement set forth in this Regulation shall be followed.

All information referenced in this and the preceding article shall be submitted to the Authority when it so requests.

Article 7: Vessels that fail to provide the documents required by the previous articles of these regulations shall be subject to inspection by the Authority to determine their V, in accordance with the PC/UMS, M³, DWT, TDWT, total TEU allowed or maximum displacement, as established in this regulation.

Article 8: The Authority shall establish V to calculate the PC/UMS Net Tonnage; further, the Authority shall establish the values of TEU allowance below deck and TEU allowed above deck, as may be applicable. The Authority shall establish the DWT o TDWT for dry bulk carriers, M^3 for gas carriers and maximum displacement for warships, dredges, floating drydocks and any other ANNEX B 42

floating equipment whose tonnage is calculated based on its maximum displacement, as applicable.

The Authority may request complementary information of the vessel for the calculations of the V, TEU allowance below deck, TEU allowance above deck, DWT, TDWT, M³ and maximum displacement. Regardless of the above, the calculations may be adjusted based on the inspections to obtain the accuracy to the degree required by the Authority.

If the requested documents are not obtained or do not comply with the accuracy required by the Authority, the V, TEU allowance below deck, TEU allowance above deck, DWT, TDWT, M³ and maximum displacement, the user shall accept the figures calculated by the Authority.

Second Section Tonnage

Article 9: The tonnage of a vessel shall consist of the calculation of PC/UMS Net Tonnage, TEU allowance below deck and TEU allowance above deck, M³, DWT, TDWT, maximum displacement and tonnage by length overall, as may be applicable. These calculations shall be determined in accordance with provisions established in this Regulation.

The tonnage of novel types of craft whose construction features make application of the rules unreasonable or impossible shall be determined in a manner that is acceptable to the Authority.

Article 10: PC/UMS Net Tonnage of vessels shall be calculated by using the following formula:

PC/UMS Net Tonnage = $K_4(V) + K_5(V)$

For all vessels classified by the Authority as a passenger vessel, passengers and their belongings will be considered as cargo; therefore, all spaces that have been identified and certified for the use or possible use of passengers, such as balconies, swimming pools and corridors, will be included in V. For this type of vessel, in the calculation of the PC/UMS Net Tonnage, the definition of "excluded spaces," as defined in Regulation 2 of section 5 of ITC-69, does not apply to such spaces.

For all vessels classified by the Authority as full container vessels, the admeasurement shall be based on the total TEU allowance, which shall be calculated by the following formula:

Total TEU allowance = TEU allowance above deck + TEU allowance below deck

To determine TEU allowance below deck, TEU allowance above deck, and NTT, TTL and TTLR as may be applicable, the following conversion table will be used.

SIZE	CALCULATION	EQUIVALENCE
20' x 8'x 8.5'	1360/1360	1.00 TEU
20' x 8'x 9.5'	1520/1360	1.12 TEU

40' x 8' x 8.5'	2720/1360	2.00 TEU
40' x 8' x 9.5'	3040/1360	2.24 TEU
45' x 8' x 9.5'	3420/1360	2.51 TEU
48' x 8' x 9.5'	3648/1360	2.68 TEU
54' x 8' x 9.5'	4104/1360	3.02 TEU

Any container whose size is not listed in the preceding table, shall obtain its equivalence using the same method of calculation.

For dry bulk carriers, tolls charge shall be charged using the DWT parameter according to what is shown in the capacity plan, deadweight scale, stability booklet, hydrostatic table or any other document acceptable to the Authority.

For dry bulk carriers with a timber summer deadweight (TDWT), tolls shall be charged using on the DWT or TDWT, whichever is greater, according to what is shown in the capacity plan, deadweight scale, stability booklet, hydrostatic table or any other document acceptable to the Authority. This only applies when the vessel has a valid timber summer draft and is transiting with timber on deck.

The DWT or TDWT is determined by using the following formula:

Summer deadweight tonnage (DWT or TDWT) = Summer displacement or Timber summer displacement – *Light displacement tonnage*

For gas carriers, the tolls will be assessed based on the M³ parameter according to the capacity plan, stability booklet, cargo manual and any other document acceptable to the Authority.

For warships, dredges, floating drydocks and any other floating equipment whose tonnage is calculated based on its maximum displacement, the toll will be assessed based on the maximum displacement parameter according to stability booklet, hydrostatic tables, capacity plan and any other document acceptable to the Authority.

Article 11: Vessels whose PC/UMS Net Tonnage is calculated in accordance with Article 10, may be subject to a new admeasurement if there is a change in the V.

Article 12: The full container vessel whose total TEU allowance is calculated pursuant to Article 10, shall maintain said total as long as it has not undergone a structural or documentation change affecting the total TEU allowance. In the event of a structural change or documentation change affecting the carrying capacity of the vessel, the total TEU allowance shall be determined pursuant to the provisions of said article.

Vessels with the capacity to carry containers on upper deck, whose TEU allowance above deck has been calculated as defined in these regulations and which undergo structural or documentation changes affecting said TEU allowance above deck, said allowance shall be established using the conversion table in Article 10.

Vessels whose **DWT** or TDWT has been calculated in accordance with the provisions of Article 10, maintain their values if they do not undergo structural and stability changes or changes in hydrostatic properties that impact their deadweight scale and affect flotation line.

Vessels whose M^3 has been calculated in accordance with the provisions of Article 10, shall maintain their value if they do not undergo structural changes in cargo tanks or in its hydrostatic properties that impact their capacity.

Vessels whose maximum displacement has been calculated in accordance with the provisions of Article 10, will maintain their values as long as no structural changes, stability, or hydrostatic properties are made that impact the deadweight scale and affect the draft and consequently vary the maximum displacement.

Article 13: All volumes included in the calculation of the PC/UMS Net Tonnage shall be measured, irrespective of the fitting of insulation or the like, to the inner side of the shell or structural boundary plating in vessels constructed of metal, and to the outer surface of the shell or to the inner side of structural boundary surfaces in vessels constructed of any other material.

The V shall include the volume of the appendages of the vessel and may exclude the spaces open to the sea.

Article 14: All measurements used in the calculation of volume shall be taken to the nearest centimeter or to one-twentieth of a foot.

The volumetric values shall be calculated by generally accepted methods for the space concerned, and with the degree of accuracy accepted by the Authority, verifying the calculations in a detailed manner, so that their precision may be corroborated.

Chapter III Alternative Method for the Admeasurement of Vessels

Article 15: When an ITC 69, its equivalent or the necessary documentation to calculate the V has not been presented, or when these documents do not comply with the standards of accuracy acceptable by the Authority, the vessel will be measured to include the entire cubic contents of the closed spaces to establish V, as is defined in this chapter.

In the case a vessel classified by the Authority as a full container vessel or vessel with the capacity to carry containers on upper deck that has not submitted the Cargo Securing Manual and the General Arrangement Plan, their equivalents, or when these documents do not comply with the standards of accuracy acceptable by the Authority, the TEU allowance below deck and TEU

allowance above deck, as may be applicable, shall be established using any other method acceptable to the Authority.

In the case a vessel classified by the Authority as a dry bulk carrier that has not presented its stability booklet or hydrostatic tables, the capacity plan or when these documents do not comply with the standards of accuracy acceptable by the Authority, the DWT or TDWT will be established using any other method acceptable to the Authority.

In the case a vessel classified by the Authority as a gas carrier that has not presented its stability booklet or hydrostatic tables, the capacity plan and Certificate of Fitness for the Carriage of Chemical Products in Bulk or International Certificate of Fitness for the Carriage of Chemical Products in Bulk, as appropriate, or when these documents do not comply with the standards of accuracy acceptable by the Authority, the M³ will be established, using any other method applicable to the Authority.

Article 16: The Authority shall determine the V, TEU allowance below deck, TEU allowed above deck, DWT, TDWT, M^3 and maximum displacement, as may be applicable, as accurately as possible, based on the information available at the time of the calculation. For these calculations, generally accepted measures will be used to obtain the precision margin required by the Authority.

Article 17: Vessels that do not present the documentation required or when these documents do not comply with the precision acceptable by the Authority, shall be measured as follows:

1. The volume of structures on upper deck may be determined by any method or combination of methods that are acceptable to the Authority. These methods shall include simple geometric formulas, Simpson's rules and other standard mathematical formulas. If special procedures are used, they must be identified.

Measurements and calculations should be sufficiently detailed and concise, so as to permit easy review by the Authority.

2. The volume of the hull under the upper deck (UDV) shall be determined by using the following formula:

 $UDV = \{0.91 \text{ x} [(LOA \text{ x} \text{ MB}) \text{ x} (D - SLD)]\} + (SLDISP/1.025)$

If the previous formula proves inapplicable, the V of the hull below the upper deck shall be determined by multiplying the product of the LOA, MB and D, as defined in Part G of the Appendix, by the corresponding coefficient indicated in the following table:

LOA IN METERS	COEFFICIENT
> 0 to 30	.7150
> 30 to 60	.7250
> 60 to 90	.7360
> 90 to 120	.7453
> 120 to 150	.7328
> 150 to 180	.7870
> 180 to 210	.8202
> 210 to 240	.7870
> 240 to 270	.7328
> 270	.7453

3. The V of a vessel is equal to the sum of the volume of the structures on upper deck as determined in accordance with (1) above, and the volume of the hull below the upper deck, as determined in accordance with the parameters established in (2) above.

4. The figures of the parameters used to calculate the toll basis may be determined by any method or combination of methods that are acceptable by the Authority.

Article 18: A vessel whose method of admeasurement has been determined in accordance with article 15 may apply for re-admeasurement by submitting new corrected drawings or other relevant documents acceptable by the Authority that allow to recalculate the admeasurement of the vessel.

Chapter IV Admeasurement Certificate

Article 19: The admeasurement of vessels shall be carried out by the Authority's specialized personnel. Each vessel shall submit to the Authority, a complete set of drawings, documents, breakdown of the total volume and calculation sheets, with the dimensions that served as the basis for obtaining its ITC 69 or its equivalent, and a copy of said document.

The vessel with a net tonnage based on capacity parameters (DWT, TDWT, M³, and maximum ANNEX B 47

displacement), will submit to the Authority the drawings, deadweight scale, stability booklet, hydrostatic tables and any other document that serves as source for the corresponding parameter.

Article 20: The Authority shall deliver to each vessel, ship owner or its agent, the Toll Basis Certificate, which shall be kept on board as proof that it has been inspected and admeasured.

Article 21: The Authority may correct the Toll Basis Certificate when a difference in the admeasurement of the vessel is found after examining the documents or inspecting the vessel, as applicable.

Chapter V Warships, Dredges and Floating Drydocks

Article 22: The toll on warships, dredges and floating dry-docks, or and any other floating equipment whose tonnage is calculated based on its maximum displacement, shall be based on their fully loaded displacement. To this effect, these vessels shall be required to submit documents stating accurately the displacement tonnage at each possible mean draft.

Article 23: The fully loaded displacement referred to in the preceding article shall be determined in a manner acceptable to the Authority, in metric tons.

Article 24: If the user does not submit the necessary documents, the Authority may use any acceptable and practicable method to determine the fully loaded displacement.

Chapter VI Final Provisions

Article 25: For tolls purposes, a vessel will be considered in ballast when the following conditions are met:

1. It may not carry passengers except for courtesy passengers, does not apply to passenger vessels.

2. It may not carry fuel for its own consumption in quantities that exceed the capacity of the spaces designed and certified for it, as shown in the vessel's capacity plan or any official documents.

3. For cases where the vessel carries containers on deck, the Authority must determine the purpose of the containerized cargo. If the purpose is not commercial, the container is charged as NTT but the ballast condition is not invalidated. If the purpose is commercial, the container is charged as NTT and the toll must be charged using the laden rate.

4. LPG vessels can carry up to a maximum of two (2) percent of the total cargo capacity expressed in cubic meters (LPG) of the spaces designed and certified for it, as shown in the vessel's capacity plan or any official document.

5. LNG vessels may carry up to a maximum of ten (10) percent of the total cargo capacity expressed in cubic meters (LNG) of the spaces designed and certified for it, as shown in the vessel's capacity plan or any official document.

6. It may not carry cargo, materials or products with the exception of those for the operation of the vessel or for the use or consumption on board by the crew, as determined by the Authority.

7. Cable ships can carry up to a maximum of 50 MT of cable, provided that the cable is in pieces intended to be used for threading machinery and not for generating income.

8. Salt, which is usually carried by fishing vessels otherwise in ballast, exclusively for the vessel's own use.

Notwithstanding the preceding paragraph, a vessel of any segment may be considered in ballast when u sing a minimum percentage of its capacity while, as determined by the Board of Directors on a proposal from the Administration. To this end, the Administration shall previously submit to the Board of Directors the well-supported proposal indicating the segment and type of vessel and the minimum percentage of vessel capacity for it to be considered in ballast and the time of the year in which it intends to apply this provision.

Article 26: The transit of a vessel passing through the locks at either end of the Panama Canal and returning to the original point of entry without passing through the locks at the other end of the Canal, shall be considered a full transit. Re-entry of the same vessel shall be considered a new transit.

Article 27: Vessels that, based on their length overall and PC/UMS Net Tonnage, pay according to the fixed minimum tolls, are exempt from the admeasurement, except for those cases established in other regulations.

APPENDIX

A. EXPANSION ON THE DEFINITION OF MOULDED DEPTH:

In wood and composite vessels the distance is measured from the lower edge of the keel rabbet. Where the form at the lower section of the midvessel section is of a hollow character, or where thick garboards are fitted, the distance is measured from the point where the line of the flat of the bottom continued inwards cuts the side of the keel.

In vessels having rounded gunwales, the moulded depth shall be measured to the point of intersection of the moulded lines of the deck and side shell plating, the lines extending as though the gunwales were of angular design.

Where the deck is stepped and the raised section of the deck extends over the point at which the moulded depth is to be determined, the moulded depth shall be measured to a line of reference extending from the lower section of the deck along a line parallel with the raised section.

B. MEANING OF THE SYMBOLS USED WITH THE FIGURES IN THIS REGULATION:

O = excluded space C

= enclosed space

I = space to be considered as an enclosed space.

Hatched in parts to be included as enclosed spaces. B

= breadth of the deck in way of the opening

In vessels with rounded gunwales the breadth is measured as indicated in Figure 11.

C. DEFINITION OF EXCLUDED SPACES:

Are the spaces described below, unless they meet any of the following three conditions, in which case they shall be considered enclosed spaces:

- The space is fitted with shelves or other means for securing cargo or stores.
- The openings are fitted with any means of closure.
- The construction provides any possibility of such openings being closed.

1.a. A space within an erection opposite an end opening extending from deck to deck except

for a curtain plate of a depth not exceeding by more than 25 millimeters (one inch) the depth of the adjoining deck beams, such opening having a breadth equal to or greater than 90 percent of the breadth of the deck at the line of the opening of the space. This provision shall be applied so as to exclude from the enclosed spaces only the space

between the actual end opening and a line drawn parallel to the line or face of the opening at a distance from the opening equal to one- half of the width of the deck at the line of the opening (Figure 1):



Rg. 1

1.b. Should the width of the space because of any arrangement except by convergence of the outside plating, become less than 90 percent of the breadth of the deck, only the space between the line of the opening and a parallel line drawn through the point where the warships width of the space becomes equal to or less than 90 percent of the breadth of the deck shall be excluded from the volume of enclosed spaces. (Figures 2, 3 and 4):



Fig. 2



1.c. Where an interval which is completely open except for bulwarks or open rails separates

any two spaces, the exclusion of one or both of which is permitted under paragraphs 1.a and 1.b, such exclusion shall not apply if the separation between the two spaces is less than the least half breadth of the deck in way of the separation. (Figures 5 and 6):



2. A space under an overhead deck covering open to the sea and weather, having no other connection on the exposed sides with the body of the vessel than the stanchions necessary for its support. In such a space, open rails or a bulwark and curtain plate may be fitted or stanchions fitted at the vessel's side, provided that the distance between the top of the rails or the bulwark and the curtain plate is not less than 0.75 meters (2.5 feet) or one-third of the height of the space, whichever is the greater. (Figure 7).



3. A space in a side-to-side erection directly in way of opposite side openings not less in height than 0.75 meters (2.5 feet) or one-third of the height of the erection, whichever

is the greater. If the opening in such an erection is provided on one side only, the space to be excluded from the volume of enclosed spaces shall be limited inboard from the opening to a maximum of one-half of the breadth of the deck in way of the opening (Figure 8).



4. A space in an erection immediately below an uncovered opening in the deck overhead, provided that such an opening is exposed to the weather and the space excluded from enclosed spaces is limited to the area of the opening. (Figure 9).



5. A recess in the boundary bulkhead of an erection which is exposed to the weather and the opening of which extends from deck to deck without means of closing, provided that the interior width is not greater than the width at the entrance and its extension into the erection is not greater than twice the width of its entrance. (Figures 10 and 11).



5, 10



D. EXPANSION OF THE DECK:

In a vessel having a stepped deck, the lowest line of the exposed deck and the continuation of that line parallel to the upper section of the deck is taken as the deck.

E. DETERMINATION OF THE PC NET TONNAGE IN ACCORDANCE WITH THE UMS:

Explanation of the component of the formula as stated in

Article 10: PC/UMS Net Tonnage = $K_4(V) + K_5(V)$

a. $K_4 = \{0.25 + [0.01 \times Log10(V)]\} \times 0.830$

b. $K_5 = [Log 10(DA-19)]/\{[Log 10(DA-16)] \times 17\}]$

If the number of passengers (N1 + N 2) is greater than 100 or DA is equal to or less than 20.0 meters, then K5 is equal to zero.

c. V = Total volume of all enclosed spaces of the vessel in cubic meters and is identical to V as specified in the 1969 International Convention on Tonnage Measurement of Ships (ITC 69).

d. DA (Average depth) = The result of the division of the V by the product of the length in meters multiplied by the moulded breadth in meters. $DA = V/(L \times MB)$.

e. L (Length) is defined as 96 percent of the total length on a waterline at 85 percent of the least moulded depth measured from the top of the keel, or the length from the fore side of the stem to the axis of the rudder stock on that waterline, if that be greater. In vessels designed with a rake of keel, the waterline on which

this length is measured shall be parallel to the designed waterline.

- f. MB = Moulded breadth is defined in Article 2.
- g. N1 = Number of passengers in cabins with no more than 8 berths.
- h. N2 = Number of other passengers.

i. N1 + N2 = Total number of passengers the vessel is permitted to carry as indicated in the vessel's passenger certificate.

F. CHANGE IN THE PC/UMS NET TONNAGE:

The Authority shall perform a fair and equitable volumetric comparison where a vessel does not have total comparative volumes according to ITC 69, or other suitable source of volumetric comparison, to determine if the vessel's structure has undergone a significant change.

G. MEASUREMENT OF VESSELS WHEN TONNAGE CANNOT BE OTHERWISE ASCERTAINED:

For vessel whose net tonnage in calculated based on PC/UMS: UDV

 $= \{0.91 \text{ x} [(LOA \text{ x} \text{ MB}) \text{ x} (D - SLD)]\} + (SLDISP/1.025)$

Where:

UDV = Volume of the hull below the deck, in cubic meters.

LOA = The Length overall, i.e., the length of the vessel in meters

from the foremost to the aftermost points, including a bulbous bow if

present.

MB = Moulded breadth in meters as defined in Article 2. D =

Moulded depth in meters as defined in Article 2.

SLD = Summer loaded draft (in meters) i.e., the maximum depth

to which the vessel's hull may be immersed when in a summer zone

SLDISP = Summer loaded displacement, i.e., the actual weight in

metric tons of the water displaced by the vessel when immersed to

her SLD.