

# Tolls Assessment

Updated: 24-Oct-2017

Since the Panama Canal opening in 1914, vessels have paid tolls to transit the waterway.

Starting on October 1, 1994, tolls have been based on the Panama Canal Universal Measurement System (PC/UMS), which in turn is based on the international standard of vessel admeasurement established by the International Convention of Measurement of Ships of 1969.

As the Canal was transferred to the Republic of Panama by the end of 1999, the Canal business management went from a break-even model to one oriented towards client satisfaction, reliability and profitability.

Tolls are the fees paid by ships to use the Canal. In general, tolls are determined by ship measurements parameters. The adopted system follows the precept of article 315 of the Political Constitution of the Republic of Panama to the effect that the Panama Canal "shall remain open to the peaceful and uninterrupted transit of vessels of all nations," is consistent with the principles of International Law, and ensures equal treatment for all users of the waterway.

The revenues generated by Canal tolls are applied to capital improvements which allow the Panama Canal Authority (ACP) to offer a safe, reliable and efficient transit service to its clients.

The ACP has issued the required regulations to implement the new measurement and toll procedures and the setting of tolls, rates, and fees for the transit of vessels through the Canal.

The tonnage measurement system in use in the Canal, for the most part, is known as Panama Canal Universal Measurement System (PC/UMS), following the rules of the 1969 International Convention on Tonnage Measurement of Ships.

To determine net Canal tonnage, this system applies a mathematical formula for the measurement of total ship volume. A net Panama Canal ton is equivalent to 100 cubic feet of volumetric capacity. The appropriate rate is applied depending on whether the ship is laden or in ballast (empty). The "laden" rate is applied to ships carrying cargo, containers or passengers, and the "ballast" rate is applied to ships that are not carrying neither passengers, containers nor cargo. For a ship to be applied the "ballast" (empty) rate, it may not carry fuel for its own consumption beyond the volume of the certified tanks with the official mark for liquid fuel. Other floating craft, including warships with the exception of military and naval transports; colliers; supply vessels; and hospital ships are charged on the basis of their actual displacement tonnage. One displacement ton is equivalent to one long ton or 35 cubic feet of salt water.

In October 2002, Panama adopted a new Canal tolls structure. The structure in force until then, which dated back to 1912, was based on a rate per ton applicable to all ships. The change was based on ship size and type and provided for separate locomotive usage rates. This more equitable system that is now applied according to the transit needs of each ship, allows each vessel to be charged for the specific services it uses.

In 2005, the ACP implemented a change in its admeasurement system applicable only to full container vessels and those vessels with container-carrying capacity on-deck. The full container vessel adjustment modified the traditional measure utilized as the charge basis for these vessels, from PC/UMS Net Ton to a twenty feet container, or TEU (“twenty-foot equivalent unit”) and established the total TEU capacity, including on-deck, as the basis for the new charge. The implementation was conducted over three years, beginning on May 1, 2005, and culminating on May 1, 2007.

For other vessel types with on-deck container carrying capacity, the ACP continues to apply the PC/UMS tonnage to measure the enclosed spaces and spaces below deck, and charge a per TEU fee to the actual number of containers carried on-deck.

Prior to the implementation of the new system the ACP charged full container vessels for a small portion (8.78%) of the cargo transported on-deck and applied the PC/UMS net ton to enclosed spaces and below deck.

In 2007, continuing with the price differentiation efforts that started in 2002, the ACP modified its regulations for the admeasurement of vessels and the tolls system of the Panama Canal to more closely align Canal toll charges to the value of the route. In the case of passenger vessels, the ACP assessed tolls based on the maximum passenger capacity in accordance with the International Tonnage Certificate 69, or the vessel’s passenger ship safety certificate; vessels over 30,000 gross tons and whose PC/UMS ÷ maximum passenger capacity ratio is equal to or less than 33 were charged on a per berth basis. Following are the tolls in effect from 2007 to 2009:

Panama Canal Authority

Market Segment		Current	2007			2008			2009							
			Effective 1st of		Effective 1st of		Effective 1st of		Effective 1st of							
<b>TEU Toll</b>																
Full Containers	Laden	49.00	May	54.00	May	63.00	May	72.00								
	Ballast	39.20		43.20		50.40		57.60								
On-Deck Container Toll in other vessels	Laden	49.00	May	54.00	May	63.00	May	72.00								
<b>Toll per berth</b>																
Passenger Vessels 1/	Laden Ballast	N/A	October	100.00 80.00	October	115.00 92.00	October	120.00 96.00								
<b>Tolls per PC/UMS Ton</b>																
		1st 10K	2nd 10K	Rest	Effective 1st of	1st 10K	2nd 10K	Rest	Effective 1st of	1st 10K	2nd 10K	Rest	Effective 1st of	1st 10K	2nd 10K	Rest
General Cargo	Laden	2.96	2.90	2.85	July	3.26	3.19	3.14	May	3.63	3.56	3.50	May	3.90	3.82	3.76
	Ballast	2.35	2.30	2.26		2.59	2.53	2.49		2.88	2.82	2.77		3.10	3.03	2.98
Refrigerated Cargo	Laden	2.96	2.90	2.85	October	3.39	3.32	3.26	October	3.80	3.72	3.65	October	3.80	3.72	3.65
	Ballast	2.35	2.30	2.26		2.69	2.63	2.59		3.01	2.95	2.90		3.01	2.95	2.90
Dry Bulk	Laden	2.96	2.90	2.85	July	3.20	3.13	3.08	May	3.50	3.43	3.37	May	3.73	3.65	3.59
	Ballast	2.35	2.30	2.26		2.54	2.48	2.44		2.78	2.72	2.67		2.96	2.90	2.85
Tankers	Laden	2.96	2.90	2.85	July	3.29	3.22	3.16	May	3.70	3.63	3.57	May	3.98	3.92	3.85
	Ballast	2.35	2.30	2.26		2.61	2.55	2.51		2.94	2.88	2.83		3.18	3.11	3.05
Vehicle Carriers	Laden	2.96	2.90	2.85	July	3.24	3.18	3.12	May	3.60	3.52	3.46	May	3.87	3.79	3.72
	Ballast	2.35	2.30	2.26		2.57	2.52	2.47		2.86	2.80	2.75		3.07	3.01	2.95
Passenger Vessels 1/	Laden	2.96	2.90	2.85	October	3.39	3.32	3.26	October	3.80	3.72	3.65	October	3.95	3.87	3.80
	Ballast	2.35	2.30	2.26		2.69	2.63	2.59		3.01	2.95	2.90		3.14	3.07	3.02
Others	Laden	2.96	2.90	2.85	July	3.32	3.25	3.19	May	3.78	3.70	3.64	May	4.12	4.04	3.97
	Ballast	2.35	2.30	2.26		2.63	2.58	2.53		3.00	2.94	2.89		3.27	3.20	3.15
<b>Toll per Displacement Ton</b>																
Displacement		1.64	July	1.84	May	2.09	May	2.28								

Notes:

1/ Vessels above 30,000 gross tons (GRT) and whose PC/UMS tonnage divided by maximum passenger capacity (PAX-ITC) ratio is less than or equal to 33, shall pay tolls on a per berth basis. If such a ratio is greater than 33, tolls shall be paid on the basis of PC/UMS tonnage. Vessels below or equal to 30,000 GRT shall also pay on the basis of PC/UMS tonnage.

The segmentation system by vessel type and size enhanced the possibility for the Panama Canal Authority to offer new products to the various market segments, and placed it in a position to competitively improve its services to users. Likewise, it allowed the Canal to continue its modernization program in order to remain as a key route for world trade, and a strategic resource for the social and economic development of Panama.

During informal consultations between November 2009 and April 2010, the ACP presented to the industry a new price structure. Upon consideration of the suggestions received, the ACP developed a new proposal, choosing to postpone the implementation of the new tolls until January 2011.

On the basis of discussions with industry representatives, shipping lines, and government representatives, as well as the Canal's own internal analysis, and in view of the global economic situation, the ACP decided not to proceed with a tolls adjustment in 2010 and set January 1, 2011 as the new date for implementing the tolls for all segments except reefers.

Specifically, the ACP calculated container segment tolls with a slight price adjustment to the capacity charge, and an additional new charge applicable to the number of loaded containers

aboard the vessel at the time of transit. The reefer segment increase portion applicable to the PC/UMS tons was effective April 1, 2011.

The approved 2011 tolls were as follows:

			2011					
Market Segment		Present Tolls	Approved Tolls					
			Effective 1st of					
<b>TEU Toll</b>								
Full Containers	Laden	72.00	January	Capacity Container with cargo	74.00			
				Container w/o cargo 2/	8.00			
	Ballast	57.60		Ballast	-			
On-Deck Container Toll in other vessels	Laden	72.00	January	82.00				
<b>Tolls per Berth</b>								
Passenger Vessels 1/	Laden	120.00	January	134.00				
	Ballast	96.00		108.00				
<b>Tolls per PC/UMS Ton</b>								
		1st 10K	2nd 10K	Rest	Effective 1st of	1st 10K	2nd 10K	Rest
General Cargo	Laden	3.90	3.82	3.76	January	4.41	4.32	4.25
	Ballast	3.10	3.03	2.98		3.53	3.46	3.40
Refrigerated Cargo	Laden	3.80	3.72	3.65	April	4.29	4.20	4.12
	Ballast	3.01	2.95	2.90		3.43	3.36	3.30
Dry Bulk	Laden	3.73	3.65	3.59	January	4.38	4.23	4.16
	Ballast	2.96	2.90	2.85		3.50	3.38	3.33
Tankers	Laden	3.98	3.92	3.85	January	4.46	4.39	4.31
	Ballast	3.18	3.11	3.05		3.57	3.51	3.45
Vehicle Carriers	Laden	3.87	3.79	3.72	January	4.33	4.24	4.17
	Ballast	3.07	3.01	2.95		3.46	3.39	3.34
Passenger Vessels 1/	Laden	3.95	3.87	3.80	January	4.42	4.33	4.26
	Ballast	3.14	3.07	3.02		3.54	3.46	3.41
Others	Laden	4.12	4.04	3.97	January	4.61	4.52	4.45
	Ballast	3.27	3.20	3.15		3.69	3.62	3.56
<b>Tolls per Displacement Ton</b>								
Displacement		2.28		January	3.02			

1/ Vessels above 30,000 gross tons (GRT) and whose PC/UMS tonnage divided by maximum passenger capacity (PAX-ITC) ratio is less than 33, shall pay tolls on a per berth basis. If such a ratio is greater than 33, tolls shall be paid on the basis of PC/UMS

2/ Containers without cargo will continue to be charged as part of the total vessel capacity.

The segmentation scheme has been a key element in the design of the Panama Canal price structure. The ACP is continuously evaluating the value of the route through Panama against other alternatives for each segment. An analysis of the value of the route by segment has revealed that among the vessel types established in 2002, there are significant differences in modes of operation and types of cargo transported, which merited a reconsideration of their definition.

In order to continue to more closely align Canal toll charges to the value of the route, it was approved to: (1) redefine the tanker segment in three segments, petroleum and petroleum products tankers, gas vessels that carry LPG (liquefied petroleum gas) and chemical vessels, each with its own specific vessel type; (2) redefinition of the vehicle carrier segment whereby the ro-ro vessels are incorporated into the vehicle carrier segment, given that the value of the route is the same for these two vessel types, to be known from now on as the “Vehicle Carrier and RoRo” segment.

It was approved to increase in general terms, the tolls of the specifically identified segments, in accordance with the structure presented in the following table:

	<b>2012</b>				<b>2013</b>			
<b>Market Segment</b>	<b>Approved Tariff</b>				<b>Approved Tariff</b>			
<b>Tolls per PC/UMS Ton</b>								
	Effective 1st of	1st 10K	2nd 10K	Rest	Effective 1st of	1st 10K	2nd 10K	Rest
General Cargo	October	4.74	4.64	4.57	October	5.10	4.99	4.91
		3.79	3.72	3.66		4.07	4.00	3.93
Dry Bulk	October	4.71	4.55	4.47	October	5.06	4.89	4.81
		3.76	3.63	3.58		4.04	3.90	3.85
Tanker	October	4.68	4.61	4.53	October	4.92	4.84	4.75
		3.75	3.69	3.62		3.94	3.87	3.80
Chemical Tanker	October	4.82	4.74	4.65	October	5.06	4.98	4.89
		3.86	3.79	3.73		4.05	3.98	3.91
LPG	October	4.75	4.68	4.59	October	4.99	4.91	4.82
		3.84	3.77	3.71		4.07	4.00	3.93
Vehicle Carriers and RoRo	October	4.40	4.31	4.24				
		3.52	3.45	3.40				
Others	October	4.96	4.86	4.78	October	5.33	5.22	5.14
		3.97	3.89	3.83		4.27	4.18	4.12
<b>Tolls per Displacement ton</b>								
Displacement	October	3.25			October	3.49		

Note: The tolls for the full container, reefer, passenger vessels segments, and the toll applicable to TEU on-deck in vessels other than full container, are not adjusted at this time

Furthermore, the following adjustment was approved , effective October 1, 2012, for tolls applicable to small vessels:

Length Range		Approximate Tonnage	Current toll	Approved Minimum Tolls Effective Oct 1, 2012
Meters	Feet			
<= 15.24	<= 50	194	\$500.00	\$800.00
>15.24 <= 24.384	>50 <= 80	291	\$750.00	\$1,300.00
> 24.384 <= 30.480	> 80 <= 100	389	\$1,000.00	\$2,000.00
> 30.480	> 100	583	\$1,500.00	\$3,200.00

In the last few years, the demand for transit service through the Panama Canal has been increasing. There has been significant growth in tonnage during boom economic times, with a very slight decrease during the economic recession, which points to the value of this route for our clients. The Canal has maintained a safe, reliable and efficient service, fulfilling the needs of shippers and operators, allowing global trade in a timely manner and reasonable cost.

The Canal expansion with a third set of locks has allowed the transit of neopanamax vessels<sup>1</sup>, maintain the quality of service, offer economies of scale to shippers and operators and improve the competitiveness of the route.

Considering the ACP commitment to enhance the value of the route to its users, this proposal fulfills the criteria that tolls shall be established at appropriate levels to maintain the competitiveness of the Panama route at all times and to reach a profitability level in accordance with the risk levels, investment amounts and the value added to its users.

The ACP has been receptive to the needs of the industry; however, there are market segments whose fleets are evolving and the ACP is constantly striving to adapt to the ever-changing market needs.

The approved adjustments, which became effective on April 1, 2016 –with the exception of the intra-maritime cluster tolls which took effect on April 1, 2015-, continue to approximate Canal tolls to a value that reflects the real benefit that the route brings to its users.

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<sup>1</sup> vessels of length up to 366 m (1,200'); and/or beam up to 49 m (160') and/or draft up to 15.24 m (50').

## Reformulation for full container vessels

Proposed Tariff for 2016			
Locks	TEU Range	Tariff for TTA maximum capacity	Tariff for Loaded containers on board (TEU)
Panamax 1/	< 1,000	\$60	\$30
	>= 1,000 < 2,000	\$60	\$30
	>= 2,000 < 3,500	\$60	\$30
	>= 3,500	\$60	\$30
Neopanamax 2/	< 6,000	\$60	\$40
	>= 6,000 < 7,000	\$50	\$40
	>= 7,000 < 8,000	\$50	\$40
	>= 8,000 < 9,000	\$50	\$40
	>= 9,000 < 10,000	\$50	\$35
	>= 10,000 < 11,000	\$50	\$35
	>= 11,000 < 12,000	\$50	\$35
	>= 12,000	\$50	\$35

1/ Panamax locks: for vessels with length of up to 294 m (965'), beam of up to 32.31 m (106'), draft of up to 12.04 m (39.5').

2/ Neopanamax locks: for vessels with length up to 366 m (1,200'); and/or beam up to 49 m (160') and/or draft up to 15.24 m (50').

### Loyalty program for full container vessels (proposal for 2016)

The loyalty program's aim is to encourage TEU capacity volumes in full container vessels transiting the Panama Canal by applying a preferential tariff system. To determine the customer category, the cumulative TEU volume of total TEU allowance (TTA) transited by a customer through the Panama Canal during a maximum period of 12 consecutive months is used, starting from the approval date of the Panama's Cabinet Council.

Four loyalty categories are established, based on the volumes of TEU volumes of total TEU allowance (TTA) capacity set by the customer. The four categories are as follows:

- Category 4: Applies to all customers with a registered TEU capacity volume from 0 to 450,000.
- Category 3: Applies to all customers with a registered TEU capacity volume from 450,001 to 999,999.
- Category 2: Applies to all customers with a registered TEU capacity volume from 1,000,000 to 1,499,999.
- Category 1: Applies to all customers with a registered TEU capacity volume of 1,500,000 or more.

**Category 4: Regular Tariff: no variation**

<b>"Category 4 Tariff (from 0 - 450,000 TEU)"</b>			
<b>Lock</b>	<b>TEU Range</b>	<b>Tariff for TTA maximum capacity</b>	<b>Tariff for Loaded containers on board (TEU)</b>
<b>Panamax 1/</b>	< 1,000	\$60	\$30
	≥ 1,000 < 2,000	\$60	\$30
	≥ 2,000 < 3,500	\$60	\$30
	≥ 3,500	\$60	\$30
<b>Neopanamax 2/</b>	< 6,000	\$60	\$40
	≥ 6,000 < 7,000	\$50	\$40
	≥ 7,000 < 8,000	\$50	\$40
	≥ 8,000 < 9,000	\$50	\$40
	≥ 9,000 < 10,000	\$50	\$35
	≥ 10,000 < 11,000	\$50	\$35
	≥ 11,000 < 12,000	\$50	\$35
	≥ 12,000	\$50	\$35

1/ Panamax locks: for vessels with length of up to 294 m (965'), beam of up to 32.31 m (106'), draft of up to 12.04 m (39.5').

2/ Neopanamax locks: for vessels with length up to 366 m (1,200'); and/or beam up to 49 m (160') and/or draft up to 15.24 m. (50').

**Category 3: reflects a price improvement amounting to \$1.00 in the capacity tariff**

<b>"Category 3 Tariff (from 450,001 - 999,999 TEU)"</b>			
<b>Locks</b>	<b>TEU Range</b>	<b>Tariff for TTA maximum capacity</b>	<b>Tariff for Loaded containers on board (TEU)</b>
<b>Panamax 1/</b>	< 1,000	\$59	\$30
	≥ 1,000 < 2,000	\$59	\$30
	≥ 2,000 < 3,500	\$59	\$30
	≥ 3,500	\$59	\$30
<b>Neopanamax 2/</b>	< 6,000	\$59	\$40
	≥ 6,000 < 7,000	\$49	\$40
	≥ 7,000 < 8,000	\$49	\$40
	≥ 8,000 < 9,000	\$49	\$40
	≥ 9,000 < 10,000	\$49	\$35
	≥ 10,000 < 11,000	\$49	\$35
	≥ 11,000 < 12,000	\$49	\$35
	≥ 12,000	\$49	\$35

**Price improvement amounting to \$1.00**

1/ Panamax locks: for vessels with length of up to 294 m (965'), beam of up to 32.31 m (106'), draft of up to 12.04 m (39.5').

2/ Neopanamax locks: for vessels with length up to 366 m (1,200'); and/or beam up to 49 m (160') and/or draft up to 15.24 m. (50').



**Category 2: reflects a price improvement amounting to \$2.00 in the capacity tariff**

<b>"Category 2 Tariff (de 1,000,000 - 1,499,999 TEU)"</b>			
<b>Locks</b>	<b>TEU Range</b>	<b>Tariff for TTA maximum capacity</b>	<b>Tariff for Loaded containers on board (TEU)</b>
<b>Panamax 1/</b>	< 1,000	\$58	\$30
	≥ 1,000 < 2,000	\$58	\$30
	≥ 2,000 < 3,500	\$58	\$30
	≥ 3,500	\$58	\$30
<b>Neopanamax 2/</b>	< 6,000	\$58	\$40
	≥ 6,000 < 7,000	\$48	\$40
	≥ 7,000 < 8,000	\$48	\$40
	≥ 8,000 < 9,000	\$48	\$40
	≥ 9,000 < 10,000	\$48	\$35
	≥ 10,000 < 11,000	\$48	\$35
	≥ 11,000 < 12,000	\$48	\$35
	≥ 12,000	\$48	\$35

**Price improvement amounting to \$2.00**

1/ Panamax locks: for vessels with length of up to 294 m (965'), beam of up to 32.31 m (106'), draft of up to 12.04 m (39.5').

2/ Neopanamax locks: for vessels with length up to 366 m (1,200'); and/or beam up to 49 m (160') and/or draft up to 15.24 m. (50').

**Category 1: reflects a price improvement amounting to \$3.00 in the capacity tariff**

<b>"Category 1 Tariff (from 1,500,000 or more TEU)"</b>			
<b>Locks</b>	<b>TEU Range</b>	<b>Tariff for TTA maximum capacity</b>	<b>Tariff for Loaded containers on board (TEU)</b>
<b>Panamax 1/</b>	< 1,000	\$57	\$30
	≥ 1,000 < 2,000	\$57	\$30
	≥ 2,000 < 3,500	\$57	\$30
	≥ 3,500	\$57	\$30
<b>Neopanamax 2/</b>	< 6,000	\$57	\$40
	≥ 6,000 < 7,000	\$47	\$40
	≥ 7,000 < 8,000	\$47	\$40
	≥ 8,000 < 9,000	\$47	\$40
	≥ 9,000 < 10,000	\$47	\$35
	≥ 10,000 < 11,000	\$47	\$35
	≥ 11,000 < 12,000	\$47	\$35
	≥ 12,000	\$47	\$35

**Price improvement amounting to \$3.00**

1/ Panamax locks: for vessels with length of up to 294 m (965'), beam of up to 32.31 m (106'), draft of up to 12.04 m (39.5').

2/ Neopanamax locks: for vessels with length up to 366 m (1,200'); and/or beam up to 49 m (160') and/or draft up to 15.24 m. (50').

**IMPORTANT: For the following segments, those that are not full container vessels and are not part of the “intra-maritime cluster”, but carry containers (TEU) on deck, will be charged \$90 per TEU on deck.**

## Reformulation of dry bulk vessels

Proposed Tariff and Structure for 2016													
DWT Bands 3/	Laden Transits By Commodity												Ballast Tariff (\$/DWT MT)
	Grains			Coal			Iron Ore			ODB			
	Panamax locks (\$/DWT MT) 1/	Neopanamax locks 2/		Panamax locks (\$/DWT MT)	Neopanamax locks		Panamax locks (\$/DWT MT)	Neopanamax locks		Panamax locks (\$/DWT MT)	Neopanamax locks		
		Fixed Tariff (\$/DWT MT)	Variable Tariff (\$/ Cargo MT) 4/		Fixed Tariff (\$/DWT MT)	Variable Tariff (\$/ Cargo MT)		Fixed Tariff (\$/DWT MT)	Variable Tariff (\$/ Cargo MT)		Fixed Tariff (\$/DWT MT)	Variable Tariff (\$/ Cargo MT)	
1st 5,000	\$4.09	\$5.74	\$0.35	\$3.42	\$5.15	\$0.30	\$3.40	\$4.85	\$0.28	\$4.09	\$5.74	\$0.35	\$2.75
Next 5,000	\$3.23	\$4.97	\$0.34	\$2.74	\$4.12	\$0.29	\$2.52	\$3.88	\$0.27	\$3.23	\$4.97	\$0.34	\$2.40
Next 10,000	\$2.57	\$4.21	\$0.33	\$2.45	\$3.61	\$0.28	\$2.13	\$2.91	\$0.26	\$2.57	\$4.21	\$0.33	\$2.00
Next 20,000	\$2.38	\$2.68	\$0.30	\$2.15	\$3.09	\$0.27	\$2.04	\$2.62	\$0.24	\$2.38	\$2.68	\$0.30	\$1.80
Next 20,000	\$2.09	\$1.91	\$0.25	\$2.05	\$2.06	\$0.26	\$1.94	\$1.84	\$0.20	\$2.09	\$1.91	\$0.25	\$1.75
Next 25,000	\$1.71	\$0.77	\$0.20	\$1.96	\$0.82	\$0.25	\$1.84	\$0.78	\$0.16	\$1.71	\$0.77	\$0.20	\$1.25
Next 35,000	\$1.28	\$0.38	\$0.15	\$1.47	\$0.26	\$0.20	\$0.97	\$0.24	\$0.10	\$1.28	\$0.38	\$0.15	\$0.45
Rest	\$0.86	\$0.38	\$0.10	\$0.78	\$0.10	\$0.15	\$0.49	\$0.10	\$0.05	\$0.86	\$0.38	\$0.10	\$0.25

1/ Panamax locks: Length of up to 294 m (965'), beam of up to 32.31 m (106'), draft of up to 12.04 m (39.5').

2/ Neopanamax locks: Length up to 366 m (1,200'); and/or beam up to 49 m (160') and/or draft up to 15.24 m. (50').

3/ DWT: Deadweight tons.

4/ MT: Metric tons.

## Reformulation of tanker vessels

Proposed Tanker Tariff and Structure for 2016						
Panamax locks 1/		Neopanamax locks 2/				Ballast Tariff per PC/UMS
PC/UMS Bands	\$ per PC/UMS	PC/UMS Bands (capacity)	Capacity tariff \$ per PC/UMS	Cargo Bands in MT 3/	Cargo transported \$/MT(cargo)	
First 10,000	\$5.00	First 10,000	\$5.17	First 20,000	\$0.30	\$4.14
Next 10,000	\$4.90	Next 10,000	\$5.00	Next 20,000	\$0.20	\$3.99
Next 15,000	\$4.85	Next 15,000	\$5.10	Next 20,000	\$0.35	\$3.80
Next 10,000	\$4.75	Next 10,000	\$4.00	Next 20,000	\$0.18	\$3.60
Rest	\$4.55	Rest	\$3.25	Rest	\$0.10	\$3.45

1/ Panamax locks: for vessels with length of up to 294 m (965'), beam of up to 32.31 m (106'), draft of up to 12.04 m (39.5').

2/ Neopanamax locks: for vessels with length up to 366 m (1,200'); and/or beam up to 49 m (160') and/or draft up to 15.24 m. (50').

3/MT: metric tons.

### Reformulation of the chemical tanker vessel segment

Proposed Chemical Tanker Vessel Toll Structure for 2016		
PC/UMS Bands	Laden	Ballast
First 10,000	\$5.31	\$4.52
Next 10,000	\$5.23	\$4.44
Rest	\$5.13	\$4.36

### Reformulation of LPG gas carrier vessel segment

Proposed LPG Vessel Toll Structure for 2016		
Bands in m3	Laden	Ballast
First 5,000	\$5.50	\$4.40
Next 20,000	\$2.35	\$1.88
Next 30,000	\$2.30	\$1.84
Rest	\$1.80	\$1.44

m<sup>3</sup>: cubic meter.

The ballast rate will apply to LPG gas tankers carrying up to a maximum of two (2) percent of the total cubic meters (m<sup>3</sup>) of cargo capacity.

### Establishment of LNG gas carrier vessels segment

Proposed LNG Vessel Toll Structure for 2016			
Bands in m3	Laden	Ballast	Ballast (Roundtrip)
First 60,000	\$2.50	\$2.23	\$2.00
Next 30,000	\$2.15	\$1.88	\$1.75
Next 30,000	\$2.07	\$1.80	\$1.60
Rest	\$1.96	\$1.71	\$1.50

m<sup>3</sup>: cubic meter.

The ballast rate will be applied to the LNG gas carriers transporting up to a maximum of ten (10%) percent of the total cubic meters (m<sup>3</sup>) of cargo carrying capacity. In addition, shippers that use the same vessel for a voyage to and return from an specific place through the Panama Canal, pay the laden tariff for the laden portion of the trip and would be eligible for a roundtrip ballast fee, if the return transit in ballast through the Panama Canal is made within sixty days after the laden transit was completed.

## Reformulation of vehicle carriers and Ro-Ro segment

Proposed Structure for 2016					
Load Factor (Cargo Weight MT/DWT)		Capacity Tariff (\$ per PC/UMS)			
Start	Finish	PC/UMS Ranges			
		Start →	0	25,001	62,501
		Finish →	25,000	62,500	Over
0.00%	9.99%		\$3.67	\$3.46	\$3.43
10.00%	19.99%		\$4.97	\$4.26	\$4.21
20.00%	29.99%		\$5.01	\$4.31	\$4.28
30.00%	39.99%		\$5.06	\$4.34	\$4.34
40.00%	49.99%		\$5.15	\$4.38	\$4.35
50.00%	over		\$5.21	\$4.45	\$4.43

Ballast transits are considered to have a utilization of 0%.

## Reformulation of passenger vessels

Tolls - Passenger Vessels for April 1, 2016							
Market Segment		Panamax locks 2/			Neopanamax locks 3/		
		Tariff per Berth					
Passenger Vessels 1/	Laden	\$138.00			\$148.00		
	Ballast	\$111.00			\$119.00		
		Tolls per PC/UMS					
		1st	2nd	Rest	1st	2nd	Rest
		10K	10K		10K	10K	
Passenger Vessels 1/	Laden	\$4.75	\$4.65	\$4.58	\$5.08	\$4.98	\$4.90
	Ballast	\$3.81	\$3.72	\$3.67	\$4.07	\$3.98	\$3.92

1/ Vessel above 30,000 gross tons (GRT) and whose PC/UMS tonnage divided by the maximum passenger capacity (PAX-ITC) ratio is less than 33, shall pay tolls on a per berth basis. If such a ratio is greater than 33, tolls shall be paid on the basis of PC/UMS tonnage. Vessels below or equal to 30,000 GRT shall also pay on the basis of PC/UMS tonnage.

2/ Panamax locks: for vessels with length up to 294 m (965'), beam up to 32.31 m (106'), draft up to 12.04 m (39.5').

3/ Neopanamax locks: for vessels with length up to 366 m (1,200'); and/or beam up to 49 m (160') and/or draft up to 15.24 m (50').

## Refrigerated cargo, general cargo, others segments and displacement

Market segment		Proposed Tariff -panamax & neopanamax locks for 2016		
Proposed Tariff per PC/UMS Ton for 2016				
		First	Second	Rest
		10K	10K	
General Cargo	Laden	\$5.25	\$5.14	\$5.06
	Ballast	\$4.19	\$4.12	\$4.05
Refrigerated Cargo	Laden	\$4.42	\$4.33	\$4.24
	Ballast	\$3.53	\$3.46	\$3.40
Others	Laden	\$5.71	\$5.60	\$5.51
	Ballast	\$4.58	\$4.48	\$4.42
TEU tolls for non-container vessels that carry containers on deck		\$90		
Toll per Displacement Ton				
Displacement		\$3.75		

Panamax locks: for vessels with length up to 294 m (965'), beam up to 32.31 m (106'), draft up to 12.04 m (39.5').

Neopanamax locks: for vessels with length up to 366 m (1,200'); and/or beam up to 49 m (160') and/or draft up to 15.24 m (50').

## Intra Maritime Cluster Segment (new)

### Local tourism market

Proposed Tariff for Small Local Tourism Vessels 2015	
Market Segment	Tariff
Local Tourism	\$2,000

## Marine bunkering market

### For minimum toll vessels

Length Range (actual)		Approximate Tonnage for PMT (L)	Minimum Tolls
Meters	Feet		
<= 15.24	<= 50	194	\$800.00
>15.24 <= 24.384	>50 <= 80	291	\$1,300.00
> 24.384 <= 30.480	> 80 <= 100	389	\$2,000.00
> 30.480	> 100	583	\$3,200.00

### For oceangoing vessels

Proposed Tariff 2015		
Marine Bunkering vessels		
PC/UMS Bands	\$ per PC/UMS	
	Laden	Ballast
First 10,000	\$5.00	\$4.14
Next 10000	\$4.90	\$3.99
Next 15,000	\$4.85	\$3.80
Next 10,000	\$4.75	\$3.60
Rest	\$4.55	\$3.45

## Container transshipment markets

### Container transshipment markets – with fixed cell guides

Proposed Tariff 2015		
Market Segment	Tariff for Total TEU Allowed	Tariff for Loaded containers on board (TEU)
Container Transport-Fixed Cell	\$48	\$24

**Container transshipment markets – without cell guides**

<b>Tariffs per PC/UMS Ton</b>				
<b>Market Segment</b>		<b>Proposed Tariff 2015</b>		
		<b>1st</b>	<b>2nd</b>	<b>Rest</b>
		<b>10 K</b>	<b>10K</b>	
<b>Container Transport-Non Cell</b>	<b>Laden</b>	<b>\$4.20</b>	<b>\$4.11</b>	<b>\$4.05</b>
	<b>Ballast</b>	<b>\$3.35</b>	<b>\$3.30</b>	<b>\$3.24</b>
<b>TEU tolls for other vessels that carry containers on deck and belongs to the container transport</b>				<b>\$72</b>

In the case of vessels that are part of the “intra-maritime cluster” carrying containers on deck, the applicable charge was \$72 per TEU on deck, with the exception of the segment of container transshipment markets – with fixed cell guides that pay \$48 for total TEU allowed (TEU capacity) and \$24 for loaded containers on board (TEU loaded).

The expanded Canal opened at the end of June 2016. Since then, more than two thousand neopanamax vessels have transited the new locks.

The new locks have entailed fundamental changes in Canal operations. For the first time only tugs are used to maneuver vessels inside the locks chambers (in lieu of locomotives as is the case in the panamax locks). Furthermore, additional restrictions and conditions have been established for the transit of the new segment LNG carriers due to the nature of their cargo. As can be construed, the aforementioned has an impact on resource assignment and the scheduling for these transits. The past year has provided valuable experience to gauge the productivity and utilization of the new locks and reassess the projected demand.

The demand for Canal services has been greater than anticipated as attested by the six or seven neopanamax transits per day, depending on the traffic mix and resource availability on a given day. In addition, new service patterns have emerged, new strategic alliances among shippers have taken place, and new trade routes for different types of cargo have been established for the Canal route.

Recent changes in market conditions, mainly in the full container vessel segment, led to a revision of the toll rates offered to carriers in this segment. The ACP sought to encourage the transit of container vessels in both directions and, for this reason, the proposal included more attractive rates on the southbound return voyage for this segment.

The implemented adjustments provide added benefits to the full container segment in the backhaul (return voyage) through de Panama Canal. The container/breakbulk vessels were reassigned from the “others” segment to the general cargo segment for billing and market analysis purposes. Also, LPG and LNG carrier’s tolls were adjusted to reflect the changing demand for the route, the utilization levels and the productivity of the neopanamax locks.

The proposed changes were based on industry feedback, as one of the Canal's policies is to be receptive to clients' needs. For instance, the full container vessel segment received further benefits by way of more attractive tariffs for loaded containers in the backhaul return voyage if they met certain conditions.

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

### **Reformulation of the full container vessel segment**

The tolls proposal for the full container vessels segment established a differentiated tariff for total TEU loaded (TTL – loaded containers onboard) on neopanamax container ships while encouraging backhaul transits heading south. This strategy pursues the following objectives:

- Maintain the competitiveness of liner services using the Panama Canal,
- Respond to customers' needs
- Encourage the return transit of neopanamax container ships transiting southbound
- Attract the deployment of new liner services through the Panama route,
- Foster an increase in cargo capacity volumes and the transportation of containers loaded with cargo through the interoceanic way, and
- Promote an increase in the average vessels' size of current and future liner services.

The existing tariff structure applied to container vessels is maintained, with the inclusion of the new tariff for total TEU loaded (TTL – loaded containers onboard) in the return voyage for container vessels that comply with the following conditions:

- The vessel size must be neopanamax. The vessel must perform a northbound transit and return in the southbound direction through the Panama Canal.
- On the northbound transit, the vessels must carry 70 percent or more of total TEU loaded (TTL – loaded containers onboard) of the Total TEU Allowed (TTA - maximum capacity) at the Panama Canal. Empty containers (empty TEU) on board during the northbound transit will not be taken into consideration when determining the percentage utilization of the vessel.
- The vessel must transit in both directions (northbound and southbound) in a time period no greater than 28 days. The time spent by a vessel at the anchorage or in port activities in the Atlantic side of the Canal (including Manzanillo, Colon Container Terminals, Panama Ports) will be discounted from this time.
- The proposed tariff became effective October 1, 2017 for all vessels transiting southbound which comply with the aforementioned conditions.

The loyalty program for full container vessels remains in force under the same parameters and conditions under which it currently operates.



The following table describes the approved structure for the container vessel segment.

<b>Container Vessel Tolls effective October 1, 2017</b>				
<b>Locks</b>	<b>TEU Range</b>	<b>Tariff for TTA maximum capacity</b>	<b>Tariff for loaded containers on board (TEU)</b>	<b>Tariff for loaded containers on board in return voyage (TEU) 1/</b>
<b>Panamax</b>	<b>&lt; 1,000</b>	<b>\$60</b>	<b>\$30</b>	<b>N/A</b>
	<b>≥ 1,000 &lt; 2,000</b>	<b>\$60</b>	<b>\$30</b>	
	<b>≥ 2,000 &lt; 3,500</b>	<b>\$60</b>	<b>\$30</b>	
	<b>≥ 3,500</b>	<b>\$60</b>	<b>\$30</b>	
<b>Neopanamax</b>	<b>&lt; 6,000</b>	<b>\$60</b>	<b>\$40</b>	<b>N/A</b>
	<b>≥ 6,000 &lt; 7,000</b>	<b>\$50</b>	<b>\$40</b>	<b>\$30</b>
	<b>≥ 7,000 &lt; 8,000</b>	<b>\$50</b>	<b>\$40</b>	<b>\$30</b>
	<b>≥ 8,000 &lt; 9,000</b>	<b>\$50</b>	<b>\$40</b>	<b>\$25</b>
	<b>≥ 9,000 &lt; 10,000</b>	<b>\$50</b>	<b>\$35</b>	<b>\$25</b>
	<b>≥ 10,000 &lt; 11,000</b>	<b>\$50</b>	<b>\$35</b>	<b>\$20</b>
	<b>≥ 11,000 &lt; 12,000</b>	<b>\$50</b>	<b>\$35</b>	<b>\$20</b>
	<b>≥ 12,000</b>	<b>\$50</b>	<b>\$35</b>	<b>\$20</b>

1/ • The vessel size must be neopanamax. The vessel must perform a northbound transit and return in the southbound direction through the Panama Canal.

- On the northbound transit, the vessels must carry 70 percent or more of total TEU loaded (TTL – loaded containers onboard) of the Total TEU Allowed (TTA - maximum capacity) at the Panama Canal. Empty containers (empty TEU) on board during the northbound transit will not be taken into consideration when determining the percentage utilization of the vessel.

- The time from vessel's departure from Canal waters (sea buoy) after completion of the northbound transit and its arrival to Canal waters (sea buoy) prior to the southbound transit should not be greater than 28 days. The time spent by a vessel at the anchorage or in port activities in the Atlantic side of the Canal will be discounted from this time.

- The proposed tariff will be effective October 1, 2017 for all vessels transiting southbound which comply with the aforementioned conditions.

The tariff structure for container vessels continues to encourage the deployment of neopanamax ships, providing customers with savings in their total travel costs through the economies of scale provided by larger ships. The application of a reduced rate to containers with cargo onboard neopanamax vessels in the southbound transit improves the competitiveness of the Panama Canal route in the main trade routes.

**Reassignment of Container/Breakbulk vessels from the segment “others” to the general cargo segment**

The objectives of the approved tolls for container/breakbulk are:

- To encourage container/breakbulk vessel traffic through the panamax locks.
- To respond to customers’ needs.

When incorporating container/breakbulk vessels into the general cargo segment, an appropriate toll rate is applied, since the route value is the same for both vessel types. With this measure, container/breakbulk ships can benefit from toll schemes and services consistent with their operating modes.

<b>Tolls per PC/UMS Ton effective October 1, 2017</b>				
<b>Market Segment</b>		<b>Proposed Tariff</b>		
<b>Reassignment of Container/Breakbulk vessels from Others to the General Cargo Segment</b>		<b>1st</b>	<b>2nd</b>	<b>Rest</b>
		<b>10 K</b>	<b>10K</b>	
<b>Container / Breakbulk vessels</b>	<b>Laden</b>	<b>\$5.25</b>	<b>\$5.14</b>	<b>\$5.06</b>
	<b>Ballast</b>	<b>\$4.19</b>	<b>\$4.12</b>	<b>\$4.05</b>

**Reformulation for liquid bulk vessels**

Liquid bulk vessels are divided by specific ship types: tankers, which transport crude oil and oil products; chemical tankers, utilized to carry chemicals and petrochemicals, LPG carriers, which transport liquefied petroleum gas and LNG carriers that transport liquefied natural gas.

A tolls adjustment and a tariff structure for each set of locks were implemented for the LPG gas carriers. In addition, an increase was implemented for LNG gas carriers. The changes reflected the changing nature of the demand in the main routes, utilization levels and productivity of the neopanamax locks. This adjustment led to the assessment of a fair price while maintaining the competitiveness of the route.

**Tolls adjustment for the LPG carrier vessel segment:**

The toll adjustment of the LPG gas carrier vessel segment takes into account the traffic behavior of the panamax and neopanamax vessels and therefore introduced a separation of the toll

structure, creating a new tariff for the panamax locks and another for the neopanamax locks. In addition, an increase in toll rates for panamax and neopanamax locks was approved.

This toll adjustment for the LPG gas carrier vessel segment maintains the cubic meter (m<sup>3</sup>) of cargo capacity for the collection of tolls for the panamax and neopanamax locks, as well as the four bands that includes the first 5,000 cubic meters (m<sup>3</sup>) of cargo capacity, the following 20,000 cubic meters (m<sup>3</sup>) of cargo capacity, the following 30,000 cubic meters (m<sup>3</sup>) of cargo capacity and a last band for the rest of the cargo capacity, as illustrated in the following table:

<b>Tolls - LPG Vessels effective October 1, 2017</b>				
<b>Bands in m3</b>	<b>Panamax Locks</b>		<b>Neopanamax Locks</b>	
	<b>Laden</b>	<b>Ballast</b>	<b>Laden</b>	<b>Ballast</b>
<b>First 5,000</b>	<b>\$6.49</b>	<b>\$5.19</b>	<b>\$8.25</b>	<b>\$6.60</b>
<b>Next 20,000</b>	<b>\$2.70</b>	<b>\$2.16</b>	<b>\$3.06</b>	<b>\$2.44</b>
<b>Next 30,000</b>	<b>\$2.60</b>	<b>\$2.08</b>	<b>\$2.88</b>	<b>\$2.30</b>
<b>Rest</b>	<b>\$2.25</b>	<b>\$1.80</b>	<b>\$2.21</b>	<b>\$1.77</b>

m<sup>3</sup>: carrying capacity in cubic meters

The ballast rate applies to LPG gas carriers carrying up to a maximum of 2 percent of the total cubic meters (m<sup>3</sup>) of cargo capacity. This condition applies to panamax and neopanamax locks.

#### **Adjustment of tolls for the LNG gas carrier vessel segment:**

The new toll adjustment for the LNG gas carrier vessel segment encompasses an increase in toll rates, but maintains the cubic meter (m<sup>3</sup>) of cargo capacity for the collection of tolls, as well as the four bands, which includes the first 60,000 cubic meters (m<sup>3</sup>) of cargo capacity, the following 30,000 cubic meters (m<sup>3</sup>) of cargo capacity, the following 30,000 cubic meters (m<sup>3</sup>) of cargo capacity and a last band for the rest of the cargo capacity, as illustrated in the table below. This toll structure applies to panamax and neopanamax locks.

<b>Tolls - LNG Vessels effective October 1, 2017</b>			
<b>Bands in m<sup>3</sup></b>	<b>Laden</b>	<b>Ballast</b>	<b>Ballast (Roundtrip)</b>
<b>First 60,000</b>	<b>\$2.88</b>	<b>\$2.56</b>	<b>\$2.30</b>
<b>Next 30,000</b>	<b>\$2.47</b>	<b>\$2.16</b>	<b>\$2.01</b>
<b>Next 30,000</b>	<b>\$2.38</b>	<b>\$2.07</b>	<b>\$1.84</b>
<b>Rest</b>	<b>\$2.25</b>	<b>\$1.97</b>	<b>\$1.73</b>

m<sup>3</sup>: carrying capacity in cubic meters

The ballast rate applies to the LNG gas carriers transporting up to a maximum of 10 percent of the total cubic meters (m<sup>3</sup>) of cargo carrying capacity. In addition, shippers that use the same vessel for a voyage to and return from an specific place through the Panama Canal, pay the tariff for laden vessels and have the option to receive a special roundtrip ballast fee, if the transit in ballast through the Panama Canal is made within 60 days after the laden transit was completed.