

## **APPENDIX F**

### **DISCOUNT FOR FREQUENT USER**

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### **RELATED TAX RATES REGARDING THE DISCOUNT FOR FREQUENT USER**

INTERNATIONAL TENDER No 01/2019

**CONCESSION TO PROVIDE PUBLIC SERVICES FOR OPERATION, MAINTENANCE AND MAKING OF INVESTMENTS REQUIRED FOR EXPLOITATION OF THE HIGHWAY SYSTEM CALLED THE PIRACICABA-PANORAMA LOT**

### DISCOUNT FOR FREQUENT USER

1. This Appendix describes the rules applicable to TOLL TARIFF to be charged to USERS who opt for the Electronic Payment System (AVI) and who travel on Category 1 vehicles on the ROAD SYSTEM, according to the number of passings made on the same TOLL STATION, in the same flow direction and within the same calendar month, according to the rules and specifications of Frequent User Discount indicated in item 4.11.1 of ANNEX 4.
2. The rates applicable to the dues for the DISCOUNT FOR FREQUENT USER (DFU) shall be adjusted whenever the TOLL TARIFFS are modified, i.e. on the occasion of annual readjustments and / or tariff requalifications, in accordance with ANNEX 4 and this Appendix.
3. The following wording defines the system and rules for the application of the DFU in accordance with the general specifications set out in ANNEX 4.
4. For Formulas 1 and 2, described below, the rule described in item 4.8 of ANNEX 4 in relation to the incidence of IQD and AD shall apply similarly.
5. The amounts resulting from the rules of this Appendix are subject to the rules described in item 5 of ANNEX 4.
6. For a given TOLL STATION, in a given year of the CONCESSION, we have the following information:

#### FORMULA 1

$$T = (TKM_S \times TCP_S) + (TKM_D \times TCP_D)$$

#### FORMULA 2

$$T_{DFU} = (TKM_S \times ExtRef_S) + (TKM_D \times ExtRef_D)$$

In which,

T: is the Base Tariff, applicable to the tariff of Users opting for the manual payment system, as per ANNEX 4

TKMS: is the kilometer tariff for single lane segments as per ANNEX 4

TKMD: is the kilometeric tariff for double lane segments as per ANNEX 4

TCPS: is the single-lane extension of the station's stretch of coverage.

TCPD: is the double-lane extension of the station's stretch of coverage.

TDUF: is the DFU (DISCOUNT FOR FREQUENT USER) reference tariff.

ExtRefS: is the single-track extension of the DFU (DISCOUNT FOR FREQUENT USER) referential section.

ExtRefD: is the double-lane extension of the DFU (DISCOUNT FOR FREQUENT USER) referential section.

1. The sections of coverage and the reference extensions, set forth in Table 1 below, will be specific to each TOLL STATION, will be adjusted during the CONCESSION period due to the tariff requalifications resulting from the evolution of the planned duplication works, pursuant to ANNEX XXI.

2. The following Formula 3 shows the calculation of the rate to be charged to a Frequent User according to the amount of trips made by them on the same (i) Toll Station, (ii) flow direction and (iii) calendar month.

### FORMULA 3

$$T_v = T \times (1 - 5\%) \times (1 - PDU)^{v-1}$$

But:

T: is the Base Tariff of a certain Toll Station, calculated according to Formula 1 above.

Tv: is the tariff of the v-th trip in the month

PDU: is the Unit Discount Percentage

5%: is the percentage discount for the use of the electronic payment system (AVI) provided in item 4.2 of ANNEX 4.

1. In view of the following conditions, the toll tariff charged by the User entitled to the DFU (DISCOUNT FOR FREQUENT USER) will be progressively reduced until the 30th trip in the month, according to a fixed percentage reduction in relation to the tariff charged in the previous trip, when the Minimum Tariff for a certain Toll Station, calculated in accordance with Formula 4. From the 31st trip in the month, the Minimum Tariff will be charged on all additional trips until the end of the respective calendar month.

#### FORMULA 4

$$T_{min} = T \times (1 - 5\%) \times (1 - PDU)^{29}$$

But,

$$T_1 \geq T_v \geq T_{min} \text{ to } 1 \leq v \leq 30$$

$$T_v = T_{min} \text{ to } v \geq 30$$

In which,

$T_{min}$ : is the Minimum Tariff to be charged to Frequent Users, from the 30th pass in a certain Toll Station, in the same calendar month and direction of flow.

1. The Unit Discount Percentage (PDU) shall be calculated in accordance with Formula 5 below, described in successive steps, subject to the above conditions. The PDU will be different for each Toll Plaza and will be adjusted during the Concession period due to the tariff requalifications resulting from the evolution of the planned duplication works.

#### FORMULA 5

$$\frac{\sum_{v=1}^{30} T_v}{30} = T_{DUF} \quad \text{Step 1}$$

$$\frac{\sum_{v=1}^{30} [T_1 \times (1 - PDU)^{v-1}]}{30} = T_{DUF} \quad \text{Step 2}$$

$$\sum_{v=1}^{30} [T_1 \times (1 - PDU)^{v-1}] = T_{DUF} \times 30 \quad \text{Step 3}$$

The table below shows the referential extensions of each TOLL STATION

**TABLE 1**

Station	Road segments that make up the referential extension	Referential Extension (km)				
		Total	Concession Start		Concession End	
			One way track	Double track	One way track	Double track
SP-310 - km 181,5	SP-310 - km 172,830 to km 193,140	20,31	-	20,31	-	20,31
SP-310 - km 217,0	SP-225 - km 091,430 to km 097,530 SP-310 - km 206,620 to km 227,800	27,28	-	27,28	-	27,28
SP-225 - km 106,9	SP-225 - km 097,530 to km 130,990	33,46	-	33,46	-	33,46
SP-225 - km 143,8	SP-225 - km 130,990 to km 159,910	28,92	-	28,92	-	28,92
SP-225 - km 199,4	SP-225 - km 183,850 to km 207,020	23,17	-	23,17	-	23,17
SP-308 - km 180,4	SP-308 - km 173,622 to km 194,200	20,58	15,80	4,78	-	20,58
SP-304 - km 183,3	SP-304 - km 168,512 to km 191,170	22,66	-	22,66	-	22,66
SP-304 - km 210,8	SP-304 - km 201,140 to km 223,630	22,49	22,49	-	-	22,49
SP-304 - km 256,4	SP-304 - km 245,020 to km 270,950	25,93	25,93	-	-	25,93
SP-294 - km 366,9	SP-294 - km 347,030 to km 380,540 SP-293 - km 017,200 to km 024,850	41,16	7,65	33,51	-	41,16
SP-294 - km 426,2	SP-294 - km 420,260 to km 445,600	25,34	-	25,34	-	25,34
SP-294 - km 477,2	SP-294 - km 458,124 to km 481,300	23,18	-	23,18	-	23,18
SP-294 - km 551,6	SP-294 - km 547,510 to km 561,190	13,68	1,15	12,53	-	13,68
SP-294 - km 581,8	SP-294 - km 569,560 to km 593,190	23,63	23,63	-	-	23,63
SP-294 - km 623,3	SP-294 - km 617,700 to km 636,950	19,25	13,41	5,84	-	19,25
SP-294 - km 668,4	SP-294 - km 647,260 to km 675,230	27,97	26,53	1,44	-	27,97
SP-284 - km 457,2	SP-284 - km 447,238 to km 475,279	28,04	28,04	-	-	28,04
SP-284 - km 532,2	SP-284 - km 519,000 to km 550,530	31,53	30,79	0,74	-	31,53
SP-425 - km 433,5	SP-425 - km 430,040 to km 450,300	20,26	-	20,26	-	20,26
SP-425 - km 400,0	SP-425 - km 397,600 to km 430,040	32,44	31,92	0,52	-	32,44
SP-293 - km 001,4	SP-293 - km 000,100 to km 017,200	17,10	17,10	-	-	17,10

**Example:**

The following is an example of applying the formulation described in this Appendix.

**Period:** concession start

**Kilometer Tariff (TKM):**

One way track: R\$0,106475/km

Double track: R\$0,149097/km

**Station:** SP 308 - km 180,4

**Toll Plaza Coverage (TCP):** 45,28km

**One way track:** 40,50km

**Double track:** 4,78km

**Tariff:**  $T = (0,106475 \times 40,50) + (0,149097 \times 4,78) = R\$5,02492 \approx R\$5,02$

**Referential Extension:** 20,58km

One way track: 15,80km

Double track: 4,78km

**Referential Tariff:**  $T_{DUF} = (0,106475 \times 15,80) + (0,149097 \times 4,78) = R\$2,39499 \approx R\$2,39$

**Unit Discount Percentage:**  $\sum_{v=1}^{30} (1 - PDU)^{v-1} = 30 \times \frac{2,39499}{5,02492 \times (1 - 5\%)} \Rightarrow PDU = 5,38\%$

**First Trip Tariff:**  $T_1 = 5,02 \times (1 - 5\%) = R\$4,77$

**Minimum Tariff:**  $T_{min} = 5,02 \times (1 - 5\%) \times (1 - 5,38\%)^{29} = R\$0,96$

**Tariff per trip within the same calendar month:**

$$T_v = T_{v-1} \times (1 - 5,38\%)$$

Or:

$$T_v = 5,02 \times (1 - 5\%) \times (1 - 5,38\%)^{v-1}$$

**Sample Price List Applicable to Users who are entitled to Discount for Frequent Users:**

<b>Travel of a USER who travels the Toll Station in the same direction during the calendar month.</b>	<b>Previous Travel Tariff (R\$)</b>	<b>Unit Discount Percentage</b>	<b>Tariff (R\$)</b>
1st	-	-	4,77
2nd	4,77	5,38%	4,52
3rd	4,52	5,38%	4,27
4th	4,27	5,38%	4,04
5th	4,04	5,38%	3,83
6th	3,83	5,38%	3,62
7th	3,62	5,38%	3,43
8th	3,43	5,38%	3,24
9th	3,24	5,38%	3,07
10th	3,07	5,38%	2,90
11th	2,90	5,38%	2,75
12th	2,75	5,38%	2,60
13th	2,60	5,38%	2,46
14th	2,46	5,38%	2,33
15th	2,33	5,38%	2,20
16th	2,20	5,38%	2,08
17th	2,08	5,38%	1,97
18th	1,97	5,38%	1,86
19th	1,86	5,38%	1,76
20th	1,76	5,38%	1,67
21th	1,67	5,38%	1,58
22th	1,58	5,38%	1,49
23th	1,49	5,38%	1,41
24th	1,41	5,38%	1,34
25th	1,34	5,38%	1,27
26th	1,27	5,38%	1,20
27th	1,20	5,38%	1,13
28th	1,13	5,38%	1,07
29th	1,07	5,38%	1,02
30th	1,02	5,38%	0,96